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VOLUME XXII



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INDEX TO THE ECONOMIC JOURNAL

VOLUME XXII

ORIGINAL ARTICLES:—

	PAGE
✓Asiaticus, The Rise and Fall of the Indigo Industry in India	237
Bailward, W. A., Recent Developments of Poor Relief... ..	542
Bickerdike, C. F., The Principle of Land Value Taxation	1
Bowley, Prof. A. L., Wages and the Mobility of Labour	46
Cohn, Prof. Gustav, The Increase of Population in Germany	34
Cohn, Prof. Gustav, Depreciation of Government Securities in Germany ...	554
Doubt, A. G., Economic Changes in the Textile and Dress Industries of the United Kingdom	231
Duckworth, A., White Australia: A Study of Australian Vital Statistics ...	421
Edgeworth, Prof. F. Y., Contributions to the Theory of Railway Rates. III.	198
Fay, C. R., Co-Partnership in Industry	529
Fisher, Prof. Irving, A More Stable Gold Standard	570
Gretton, R. H., Historical Notes on the Lot-Meadow Customs at Yarnton, Oxon.	5
Howe, F. A., The Sensitiveness of the Modern Seaport... ..	410
Hutchinson, Prof. Lincoln, Panama Canal Tolls and Theory of Monopoly Prices	563
Lavington, F., Uncertainty in its Relation to the Rate of Interest	398
Lehfeldt, Prof. R. A., Public Loans and the Modern Theory of Interest ...	16
Robertson, D. H., A Narrative of the Coal Strike	365
Stockbroker, A., The Depreciation of British Home Investments	219
Tschuprow, Prof. Al. A., The Break-up of the Village Community in Russia	173
Wedgwood, J. C., M.P., The Principle of Land Value Taxation	388

REVIEWS:—

Andersson, Thor, <i>Statistikens Själfständighets-förklaring i Sverige</i> . By A. W. Flux	106
Antonolli, Etienne, <i>Les Actions de Travail dans les Sociétés Anonymes à participation ouvrière</i> . By C. R. Fay	481
Atkinson, Mabel, and Margaret McKillop, <i>Economics: Descriptive and Theo- retical</i> . By H. S. Furniss	71
Banerjee, P., <i>A Study of Indian Economics</i> . By Sir Theodore Morison ...	80
Bellet, Daniel, <i>Le Chômage et son Remède</i> . By D. F. Schloss... ..	81
Berardi, D., <i>La Moneta nei suoi rapporti quantitativi</i> . By C. Violet Butler	105
Blanchard, G., <i>Cours d'Economie Politique</i> . By M. Epstein	469
Bosanquet, Mrs. Bernard, <i>Social Conditions in Provincial Towns</i> . By M. N. Keynes	87

REVIEWS (continued)

	PAGE
Boven, Pierre, <i>Les applications mathématiques à l'économie politique</i> . By Prof. V. Pareto	467
Bray, Reginald, <i>Boy Labour and Apprenticeship</i> . By N. B. Dearle ...	85
Burch, H. B., and Scott Nearing, <i>Elements of Economics</i> . By W. G. Constable	608
Butler, C. Violet, <i>Social Conditions in Oxford</i> . By Dorothy Kemp ...	611
Cannan, Prof. Edwin, <i>The Economic Outlook</i> . By J. H. Clapham ...	577
Cannan, Prof. Edwin, <i>The History of Local Rates in England, in Relation to the Proper Distribution of the Burden of Taxation</i> . (2nd edition). By G. T. Reid	444
Carlike, W. W., <i>Monetary Economics</i> . By F. Lavington	274
Carr, A. S. Comyns, W. H. Stuart Garnett, and J. H. Taylor (with a preface by the Right Hon. D. Lloyd George, M.P.), <i>National Insurance</i> . By G. F. Shove	291
Chapman, Prof. S. J., <i>Outlines of Political Economy</i> . By H. S. Furniss ...	71
Clay, Sir Arthur, <i>Syndicalism and Labour</i> . By H. S. Furniss	580
<i>Commission on the Cost of Living in New Zealand</i> . By J. M. Keynes ...	595
Cox, Harold, <i>Labour Unrest</i> . By Sidney Ball	436
Cunningham, W., D.D., <i>The Causes of Labour Unrest, and the Remedies for it. The Draft of a Report</i> . By Sidney Ball	436
Cunningham, W., D.D. (with a Preface by the Rt. Hon. Joseph Chamberlain, M.P.), <i>The Case Against Free Trade</i> . By L. L. Price	164
D'Ambrosio, M. A., <i>La Passivité Économique</i> . By Prof. H. O. Meredith	615
Dawson, W. H., <i>Social Insurance in Germany</i> . By I. G. Gibbon	457
Fraccacreta, A., <i>Le forme del progresso economico in Capitanata</i> . By C. Violet Butler	480
Geplart, W. F., <i>Principles of Insurance</i> . By D. E. W. Gibb	99
Goldmark, Josephine, <i>Fatigue and Efficiency</i> . By L. S. Woolf	471
Gonner, Prof. E. C. K., <i>Common Land and Inclosure</i> . By J. H. Clapham ...	248
Haines, Henry S., <i>Problems in Railway Regulation</i> . By W. T. Stephenson ...	94
Hammond, J. L., and Barbara, <i>The Village Labourer, 1760-1832: a Study in the Government of England before the Reform Bill</i> . By J. H. Clapham	248
Hillringhaus, August, <i>Die deutschen Roheisensyndicate</i> . By G. R. Carter ...	287
Hirst, F. W., <i>Porter's Progress of the Nation</i> . By Prof. W. J. Ashley ...	460
Huan-Chang, Chen, <i>The Economic Principles of Confucius</i> . By J. M. Keynes ...	584
Jevons, W. S., <i>Theory of Political Economy</i> (4th Edition). By J. M. Keynes	78
Jézé, Gaston, <i>Cours Élémentaire de Science des Finances</i> . By Stanley H. Turna	276
Keatinge, G., <i>Rural Economy in the Bombay Deccan</i> . By Sir James Wilson ...	258
Kennaf, K. K., <i>Income Taxation</i> . By J. C. Stamp	598
Klarmann, Sophie, <i>Die freien Gewerkschaften</i> . By M. Epstein	484
Knoop, Douglas, <i>Principles and Methods of Municipal Trading</i> . By Prof. Edwin Cannan	448
Landauer, Edgar, <i>Handel und Produktion in der Baumwollindustrie</i> . By H. W. Macrosty	607
Latifi, A., <i>The Industrial Punjab</i> . By Sir James Wilson	261
Layton, Walter T., <i>Introduction to the Study of Prices, with special reference to the History of the Nineteenth Century</i> . By L. L. Price	270
Leake, P. D., <i>Depreciation and Wasting Assets</i> . By J. C. Stamp	280

REVIEWS (continued)—

	PAGE
Levine, Louis, <i>The Labor Movement in France: A Study in Revolutionary Syndicalism.</i> By Prof. W. J. Ashley ...	257
Levy, Hermann, <i>Monopoly and Competition: a Study in English Industrial Organization.</i> By Prof. F. Y. Edgeworth ...	89
Lewinski, J., <i>L'Evolution Industrielle de la Belgique.</i> By Agnes Dawson ...	92
Lexis, Wilhelm, <i>Allgemeine Volkswirtschaftslehre.</i> By A. W. Flux ...	75
Lloyd, T., <i>The Theory of Distribution and Consumption.</i> By W. T. Layton ...	286
Lowenthal, Estlier, <i>The Ricardian Socialists.</i> By C. R. Fay ...	255
Macdonald, J. Ramsay, <i>Syndicalism.</i> By H. S. Furniss ...	580
Macgregor, D. H., <i>The Evolution of Industry.</i> By H. S. Furniss ...	90
McIlraith, J. W., <i>The Course of Prices in New Zealand.</i> By J. M. Keynes ...	595
Marengo, Emilio, and Others, <i>Il banco di san Giorgio.</i> By C. Violet Butler ...	103
Moll, Bruno, <i>Zur Geschichte der Vermögenssteuern.</i> By L. B. Naymier ...	296
Moll, Bruno, <i>Zur Geschichte der englischen und amerikanischen Vermögenssteuern.</i> By W. M. J. Williams ...	601
Money, L. G. Chiozza, <i>Insurance versus Poverty.</i> By I. G. Gibbon ...	454
Moore, Henry L., <i>Laws of Wages.</i> By Prof. F. Y. Edgeworth ...	66
Nielsen, Axel (translated by Gustav Bargum), <i>Die Entstehung der deutschen Kameralwissenschaft.</i> By L. B. Naymier ...	300
Payne, E. George, <i>An Experiment in Alien Labor.</i> By Harold Wright ...	268
Perin, Dr. René, <i>Das Problem des unrichtigen Wertzuwachses.</i> By J. C. Stamp ...	475
Pim, F. W., <i>The Railways and the State.</i> By W. M. Acworth ...	452
Prato, Giuseppe, <i>L'espansione commerciale inglese nel primo settecento.</i> By C. Violet Butler ...	301
Pratt, E. A., <i>Inland Transport and Communication in England.</i> By W. T. Stephenson ...	290
Raper, C. L., <i>Railway Transportation.</i> By W. M. Acworth ...	588
Robertson, W. A., <i>Combination among Railway Companies.</i> By W. T. Stephenson ...	594
Robinson, F. P., <i>Trade of East India Company, 1709-1813.</i> By W. R. Scott ...	485
Rowntree, Seebohm, and Bruno Lasker, <i>Unemployment: a Social Study.</i> By N. B. Dearle ...	83
Sainsbury, E. B., <i>Court Minutes of East India Company, 1644-49.</i> By W. R. Scott ...	613
Schilder, S., <i>Entwicklungstendenzen der Weltwirtschaft.</i> By H. W. Macrosty	604
Schloesser, H. H., and W. Smith Clark, <i>The Legal Position of Trade Unions.</i> By C. P. Sanger ...	293
Scott, W. D., <i>Increasing Human Efficiency in Business.</i> By L. S. Woolf ...	471
Sensini, Guido, <i>La Teoria della Rendita.</i> By Prof. V. Pareto ...	467
Shaw, Norman, <i>The Soya Bean of Manchuria.</i> By A. Rose ...	102
Solntsev, S. I., <i>Zarabotnyay Plata kak problema raspredeleniya.</i> By S. Rapoport ...	203
Sombart, Werner, <i>Die Zukunft der Juden.</i> By J. H. Clapham ...	294
Spargo, J., and G. L. Arner, <i>Elements of Socialism.</i> By W. G. Constable ...	610
Stockton, F. T., <i>The Closed Shop, in American Trade Unions.</i> By Sophy Sanger ...	483
Strutz, Dr., <i>Der Wertzuwachs in Reichszuwachssteuergesetz.</i> By J. C. Stamp ...	475
Tarbell, Ida M., <i>The Tariff in our Times.</i> By Prof. H. D. Meredith ...	96
Taussig, F. W., <i>Principles of Economics.</i> By Prof. S. J. Chapman ...	63
Taylor, F. W., <i>The Principles of Scientific Management.</i> By L. S. Woolf ...	471

REVIEWS (continued)—

	PAGE
Théry, René, <i>Rapports des Changes Avariés</i> . By C. Rozenraad . . .	279
Todd, E. Enever, <i>The Case against Tariff Reform: A Reply to the Case against Free Trade</i> , by Archdeacon Cunningham. By C. R. Fay . . .	97
<i>Untersuchungen über das Volkssparwesen</i> . By M. Epstein . . .	616
Volta, R. Dalla, <i>Saggi economici e finanziari sull' Inghilterra</i> . By C. Violet Butler . . .	480
Weissenborn, H., <i>Die Besteuerung nach dem Überfluss</i> . By L. B. Naymier . . .	108
Wells, H. G., <i>The Labour Unrest</i> . By Sidney Ball . . .	436
Welton, Thomas A., <i>England's Recent Progress</i> . By A. W. Flux . . .	301
Whitehouse, J. H., <i>Problems of Boy Life</i> . By Arthur Greenwood . . .	266
Willgren, Karl, <i>Inkomst- och Förmögenhetsbeskattningen i Europa</i> . By A. W. Flux . . .	478
Williams, R., <i>The Liverpool Docks Problem</i> . By R. H. Tawney . . .	263

NOTES AND MEMORANDA:—

Ållsopp, H., <i>The Future of Trade Unionism</i> . . .	130
Carter, G. H. A., <i>The Rhenish-Westphalian Coal Syndicate</i> . . .	137
Chapman, Prof. S. J., <i>The Incidence of some Land Taxes</i> . . .	489
Gibbon, I. G., <i>Doctors and Insurance</i> . . .	127
Greenwood, Arthur, <i>Blind-alley Labour</i> . . .	309
Hubbard, Hon. Evelyn, <i>The Minimum Wage—Past and Present</i> . . .	303
Lehfeldt, Prof. R. A., <i>The Economic Future of Gold</i> . . .	487
Leppington, C. H. d'E., <i>The Cost of Food to the Consumer</i> . . .	134
Moore, Prof. H. L., and Prof. F. Y. Edgeworth, <i>Professor Moore's "Laws of Wages"</i> . . .	314
Perrott, H. R., <i>The Family Budget of an Indian Raiyat</i> . . .	493
Spalding, W. F., <i>The Foreign Branch Banks in London</i> . . .	620
Stamp, J. C., <i>Irish Fiscal Autonomy and Direct Taxes</i> . . .	721
Wilson, Bertram, <i>The Economic Legislation of 1911</i> . . .	110

OFFICIAL PAPERS:—

Report on Indian Paper Currency Department. By J. M. Keynes . . .	145
Report on Women and Child Wage-Earners in United States, Vols. VI, VII, and VIII. By Gladys M. Broughton . . .	147
Report of the National Monetary Commission of the United States. By J. M. Keynes . . .	150
Le minimum de salaire et les administrations publiques en Belgique. By Agnes Dawson . . .	151
Reports of United States Commissioner of Corporations. By G. F. Shove . . .	323
Report on Trade Unions in 1908-10. By N. B. Dearle . . .	330
Report on Co-Operative Societies in United Kingdom. By C. R. Fay . . .	338
Report on Earnings and Hours of Labour in Railway Service. By W. T. Layton . . .	334
Reports of the Standing Committee on Boy Labour in the Post Office. By Arthur Greenwood . . .	386
Reports on Irish Finance. By J. M. Keynes . . .	498
Memoranda on Laws affecting Strikes and Lockouts. By W. T. Layton . . .	502
Report on Women and Child Wage-Earners in United States, Vols. IX, X, XV, and XVI. By Gladys M. Broughton . . .	627

OFFICIAL PAPERS (*continued*)—

	PAGE
Return of Estimated Value of Foreign Trade of United Kingdom at Prices of 1900. By J. M. Keynes	630
First Report of the Departmental Committee on Local Taxation. By Edwin Cannan	631
Report of the Commissioners of Inland Revenue. By J. M. Keynes	632
Report of the Mint, 1911. By J. M. Keynes	633
Other Official Papers... ..	152, 337, 504, 634

OBITUARY—

Gilman, Nicholas Paine	342
Molinari, Gustave de	152
Passy, Frédéric	506
Ricca-Salerno, G.	638
Schloss, David Frederick	636
Seelohm, Frederic	338

NOTES ON CURRENT TOPICS	156-161, 343-350, 508-513, 640-645
--------------------------------	------------------------------------

RECENT PERIODICALS AND NEW BOOKS

162-172, 351-364, 514-528, 646-655

REVIEWERS:—

Acworth, W. M., 452, 583.	Macrosty, H. W., 604, 607.
Ashley, Prof. W. J., 257, 460.	Meredith, Prof. H. O., 96, 615.
Ball, Sidney, 436.	Morison, Sir Theodore, 80.
Butler, C. Violet, 103, 105, 301, 480.	Naymier, L. B., 108, 296, 300.
Cannan, Prof. Edwin, 448.	Pareto, Prof. V., 467.
Carter, G. R., 287.	Price, L. L., 270, 464.
Chapman, Prof. S. J., 63.	Rapoport, S., 283.
Clapham, J. H., 248, 294, 577.	Reid, G. T., 444.
Constable, W. G., 608, 610.	Rose, A., 102.
Dawson, Agnes, 92.	Rozenraad, C., 279.
Dearle, N. B., 83, 85.	Sanger, C. P., 293.
Edgeworth, Prof. F. Y., 66, 89.	Sanger, Sophy, 483.
Epstein, M., 469, 484, 616.	Schloss, D. F., 81.
Fay, C. R., 97, 255, 481.	Scott, W. R., 485, 613.
Flux, A. W., 75, 101, 106, 478.	Shove, G. F., 291.
Furniss, H. S., 71, 90, 580.	Stamp, J. C., 280, 475, 598.
Gibb, D. E. W., 99.	Stephenson, W. T., 94, 290, 594.
Gibbon, I. G., 454, 457.	Tawney, R. H., 263.
Greenwood, Arthur, 266.	Turner, Stanley H., 276.
Kempe, Dorothy, 611.	Williams, W. M. J., 601.
Keynes, J. M., 78, 584, 595.	Wilson, Sir James, 258, 261.
Keynes, M. N., 87.	Wolf, L. S., 471.
Lavington, F., 274.	Wright, Harold, 268.
Layton, W. T., 286.	

THE ECONOMIC JOURNAL

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THE PRINCIPLE OF LAND VALUE TAXATION.¹

THE purpose of this paper is to examine the basis of the policy of taxing land values, with a view to considering what should be the future course of development in that respect. Briefly, the main questions at issue are :

(1) Are land values to be taxed solely with a view to transferring some wealth from private persons to the State without affecting the production of wealth?

(2) Is there a better case for the taxation of land values for local than for national purposes?

The first question is answered in the negative, the second in the affirmative. The two questions, though apparently quite different, are, in fact, closely bound up together. The first part of the paper is devoted to an examination of the case for land value taxation for national purposes, as ordinarily put from the "unearned increment" point of view. This part of the paper is critical and destructive, because it is necessary to get rid of unsound or insufficient or unimportant arguments before we can "see the wood for the trees."

The second part attempts to be constructive, though in form it is partly critical of the position taken up by Professor Cannan in his paper read before the Congress of the Royal Economic Society in 1907.² That paper makes the discussion of land values turn more clearly than hitherto on the question whether the efficiency of production is involved. Though the answer given here is different from that of Professor Cannan, there is agreement as to what is the really important question.

¹ A paper read before the Economic Section of the British Association, 1910.

² *ECONOMIC JOURNAL*, March, 1907

It is not necessary to dwell at length on the more obvious and now generally recognised points in connection with land value taxation. It will be assumed that a tax on land value cannot be shifted by the owner—or if land is leased and the tax levied from the occupier, that it can be shifted back to the owner when the lease terminates. There are important qualifications of this doctrine to be taken into account in dealing with any actual scheme of land value taxation, especially of future increments, but this paper is concerned only with the more fundamental questions of principle. It is legitimate, therefore, to assume that the main distinctive feature of a tax on land values—namely, that as compared with taxes on property in general, it is borne by the owner and does not get thrown forward to the consumer, if that word may be used—is subject to no qualifications. This implies also that land values are automatic in the sense that they arise through causes not dependent on the energy and enterprise of the owner of any particular piece of land. Both the advantages claimed for this kind of taxation, and the objections to it in so far as they are based on equity, mainly involve the assumption that the hypotheses just mentioned are substantially true. The advantages claimed are that the tax is no discouragement to enterprise, and that it takes a part of income to which no individual has any right of the same nature as that which is usually conceded in reference to values which obviously owe their existence in a large degree, or entirely, to a person's work.

The main difficulty in the way of levying special taxation on land values without hardship and injustice arises out of the fact that land in this country has been bought and sold for hundreds of years, and those lands which have increased most in value are just those which have, on the whole, changed hands with the greatest frequency. The present owners cannot necessarily be regarded as being in possession of unearned wealth. Consequently, the very fact that the tax cannot, by hypothesis, be shifted on to the much larger body of "consumers" constitutes the ground of objection on the score of equity. This has been so far recognised in our own legislation that the most important tax has been imposed on future increment of value, not directly on present value.

The question whether the increment tax is more defensible on grounds of equity than a direct tax on existing land values, is one which can perhaps be answered in the affirmative, but it is too large a subject to be dealt with in this paper. It is necessary, however, to point out that there is no simple and obvious escape.

from the equity difficulty by the mere device of taxing future increments of value. The price at which anyone buys land is very largely influenced by expectations as to its future. Very often the greater part of the present value is due to discounting the future. You cannot, therefore, tax the increment without depreciating the present value to the extent of the present value of the yield of the future tax. If a piece of land now vacant will be worth £1,000 in twenty years when it will be ripe for building on, and that is correctly foreseen, will not the present value be simply £1,000 discounted at compound interest, and the increase be a uniform 3 per cent. or 4 per cent. per annum, or whatever the rate of interest may be? Anyone who has paid that present value needs the increment, it may be said, to enable him to earn interest. To tax the increment simply knocks so much off the present value. In some German municipal increment taxes interest is allowed (but simple, not compound, interest), and only increment above the rate of interest, in the case of vacant land, is subject to tax.¹

But do we really get out of the difficulty even if we allow for interest? Do we get, in theory at least, a tax on "unearned increment" pure and simple? Is it not like a tax on winnings in a lottery, *imposed after the tickets have been bought*? Land is bought with the knowledge that its future value is problematic. The purchaser gives a price for the probability. If you announce that all the chances that turn out well will be taxed, is it not exactly the same thing as knocking something directly off the present value of all the chances?

Do we not then arrive at this conclusion, that the increment value tax is no different, as regards the question of incidence and of equity, from a simple tax on existing land values, and that it has this peculiar feature which differentiates it from all other taxes in force excepting the old land tax, that the *true incidence of the whole burden, present and future, is on a limited number of existing owners of land*?

¹ When the rise has been particularly rapid and sudden, it may fairly be counted that the present holders are to a large extent in possession of unearned and unforeseen gains. It is noticeable in German discussions of the subject that this is commonly assumed to be the case, and the increment value tax has been usually levied not merely on the increment accruing from the date of the passing of the law, but from the date of the last sale, which may have been many years previous. This attitude can be easily understood when we read in Dr. Boldt's monograph "*Die Wertzuwachssteuer*" that the author, who in his capacity of member of an Income Tax Assessment Commission was able to obtain a good deal of information about profits from dealing in land, never in the course of twenty-five years came across any case of loss; and landowners, who claimed that losses and gains must be set against one another, were unable to tell him of any cases of loss in that period.

It is difficult to escape the conclusion that J. S. Mill and others have failed to appreciate the difficulty of taxing future increments in such a way that the real incidence would not be on present owners of land. Mill, though he acknowledges that the present value of land includes the prospect of future increase, seems to imply that the future increase can be taxed without any loss to present owners. He makes no reference to any allowance for interest, but he suggests that the land-owner should have the option of selling his land to the State at the value which it had antecedent to the imposition of the tax. He does not show why we should expect, in the event of the land-owner's accepting the offer at once, that the State should find any advantage in the bargain. And it is further evident that he did not quite realise the difficulty of the matter, as he goes on to say—

"The State will receive the entire rent of the lands voluntarily sold to it by their possessors, together with a tax on the future increase of rent on those properties whose owners have sufficient confidence in the justice and moderation of the State to prefer retaining them. These owners should be allowed, at any future period, to alter their minds, and give up their lands for the price first offered; or more if they can show that they have made substantial improvements at their own cost."¹

There is here no recognition of the fact that to offer, after twenty years, the original price of a piece of vacant land which the owner bought at a price which discounted the increase, is not offering him the full value.

The present Chancellor of the Exchequer also appeared to be under the impression, in the earlier stages of the discussion of the Finance Bill in 1909, that he was not taking anything from the present value of land. That was made particularly clear on the third day of the Committee stage of the Finance Bill of 1909 (June 23rd) in his reply to Mr. Jas. Hope, who gave the figures relating to the calculation of the present value of a property which was expected to take twenty years to develop.² The critics of the scheme had better ground than its advocates realised, and there is still need for further examination of the fundamental principles.

Escape from the equity difficulty is sometimes sought by appealing to the general uncertainty as to what precisely are the accepted principles of equity in taxation, and as to the real incidence of taxes. All taxes, it is said, are open to attack as

¹ *Dissertations and Discussions*, Vol. iv., p. 245.

² *Hansard*.

more or less arbitrary in their incidence, so that on this ground they could all be condemned, which would be absurd. But it is surely going too far to say, with Professor Pigou, "In matters of taxation, therefore, injustice, since it exists everywhere, cannot be appealed to anywhere."¹ We cannot escape the difficulties by merely shutting our eyes to them. The principles of equity in taxation may be more or less controversial, but differences of opinion are not so great as to justify the abandonment of all principles. Nor is the incidence of our great taxes so obscure that we can regard it as a matter of indifference how the money is obtained.

It would be admitted by everyone that to put a special tax on all persons whose names began with the letter A would be unjust. It would not be a satisfactory reply to objections to say that all taxes are more or less unjust and therefore this tax is no worse than the others. Even if it be true that it is a mere chance, but a perfectly even chance, that any given person is paying more or less than he ought to pay, if a new tax is imposed which certainly strikes A and does not strike B, there is a *prima facie* case that it is introducing inequality. A is just as likely as B to be already paying as much as he ought to pay. Why should he be singled out to pay a new tax, peculiar in the fact that of it alone we can say that its incidence is determinate?

Then take the comparison sometimes made with such taxes as that on tea. That article is selected for taxation because it is consumed by nearly everybody, and, in conjunction with taxes on coffee, cocoa, and alcoholic drinks, it does practically cover the whole population, and it certainly does not fall with excessive weight on any one person, since no one has any need for very much more tea than the average. Considerations of this kind amongst others are taken into account in deciding whether the article is or is not a suitable one for including in the scheme of indirect taxation. It is impossible to accept the theory that all idea of equity is abandoned as hopeless. When the Chancellor of the Exchequer has to raise additional revenue, the main question so far as equity is concerned that he takes into account is the distribution of the burden on rich and poor respectively. It is generally accepted that the mass of the people should feel part, at least, of the burden; and so indirect taxes like those on tea, beer, and tobacco, are imposed because it is practically certain that, taken as a whole, their incidence will be well distributed over the whole population. These indirect taxes

¹ Pigou, *The Policy of Land Taxation*, p. 12.

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certainly involve more or less loss of consumers' surplus—a loss which is something in addition to the measurable contribution handed in to the Exchequer. But there is a considerable difference between this disadvantage of indirect taxation and the injustice involved in discrimination against particular persons. A tax on owners of land values, it may be argued with a good deal of reason, is arbitrary in the same degree, or even in a greater degree, than a tax on persons whose names begin with a particular letter of the alphabet, in that the incidence of the whole future yield appears to be on the owners at the time of the introduction of the tax.

Another argument of a general nature is to the effect that all social improvements involve infliction of loss on somebody. The removal of an import tax, for instance, equally with the imposition of such a tax, necessarily inflicts undeserved losses, and the world would stand still if the infliction of loss were regarded as a fatal objection to any change in the fiscal system. This general principle is not impugned, and appeal to it is made subsequently in this paper. But just here it is necessary to observe that it does not afford so easy an escape from the equity question in connection with taxation of land values, as is very commonly taken for granted.

Let us consider the case of the removal of an import tax on corn in relation to the interests of land-owners. They would be likely, as one knows, to resist the removal on the ground, amongst others, of probable loss to themselves; but everyone feels, whether he thinks it politic to say so or not, that the State has a perfect right to remove an import tax on corn if it is believed to be acting injuriously, and that land-owners and farmers have a claim to consideration only to the extent that the change should be made without too much abruptness. No one really denies this at heart. It may be said that the governing consideration here is the fact that land-owners have presumably been given a special favour to which they had no claims on equitable grounds, and that the State may withdraw such a favour; but that it is a different thing when it is a question of inflicting loss not by mere withdrawal of a special favour. That is rather a nice point, which need not detain us since there is a more important consideration to be noticed.

The real reason why everybody, including land-owners themselves, and other people whose interests may be affected, admit the right of the State to adopt laws or to repeal laws, such as those which impose import taxes, when it is con-

sidered that national interests require such action, without over much regard to the losses which may be inflicted on certain owners of property, is that the national gain is believed to be greater than the loss which will be suffered by some persons. The losses are merely incidental. *It is not a mere question of transferring so much wealth from certain individuals to the State, or to certain other individuals. The primary purpose is the removal of conditions which hinder the most effective use of the national productive powers.* If some land-owners are likely to be injured by the removal of an import duty, or if others are likely to be injured by the imposition of one, it is not supposed that the advantage to the State is exactly measured by the injury inflicted on those who suffer loss. It is believed that the total production of wealth will be greater, and that, consequently, even those who appear likely at first to suffer loss may ultimately gain. The gain to the State of the removal of conditions which hinder the most effective use of the national energies is of a continuous and cumulative kind, having ultimate reactions in all sorts of ways which cannot be clearly foreseen, so that no set of people can be regarded as necessarily losing anything in the long run.

In connection with land value taxation of all kinds, therefore, the important question is whether it is to be regarded as a tax pure and simple, or whether any ulterior beneficial effect upon production is to be looked for. The contention of this paper is that beneficial effects upon production would follow if town and urban districts were able to apply a large part of the economic rent of land in their area to local improvements.

It is not intended to imply that there are no good reasons to be found in favour of taxation of increment values for national purposes as distinct from local. Such reasons do exist in some degree. But far the strongest case for land value taxation is to be found when the revenue derived is to be expended for the benefit of the localities from which it is drawn.

It is advisable, before explaining fully the grounds on which this contention is based, to remove a possible misapprehension as to the nature of the beneficial effects on production which are anticipated. It is a common argument that existing local rates are a burden on industry, and that a sufficient case for expecting beneficial effects on production is found in the consideration that taxation of land values would permit of some reduction of existing rates. That, however, is an argument which would apply equally well, for what it was worth, if the proceeds of a land value tax were

applied to the reduction of an indirect national tax. It may be true that most of our national taxes are less open to objection than the existing local rates, but that is, so to speak, an accidental circumstance. The argument for local application of land value taxes put forward in the following pages is quite independent of any circumstances of that kind.

It is also quite independent of the fact that there is a complicated system of grants-in-aid from the national exchequer towards various services locally administered. To apply the revenue from land value taxes to local purposes by including them in the grants and apportioning them to the localities on the principles which govern grants-in-aid, would not be local application of these revenues in the sense intended in this article, because the revenues assigned to any locality would not be proportioned to the yield of the tax in that locality. That method of local application, though it may possibly be convenient at the moment, is in direct variance with what are claimed to be, in this article, the fundamental reasons which afford justification for taxation of land values. So long as the whole thing is small, perhaps it does not much matter what is done with the revenue. But if we consider future developments in the next fifty or hundred years, it is a matter of importance that sound principles should be followed.

To many persons it has seemed quite obvious that land values, if taxed at all, should be taxed for local purposes. But it is not really so obvious when the matter is investigated in the light of the economic theory of rent. In fact, the general trend of economic opinion is rather the other way. The most illuminating discussion of the question at issue, the paper read by Professor Cannan before the Congress of the Royal Economic Society in 1907 (*ECONOMIC JOURNAL*, March 1907), puts strongly the case against local application of land value taxes. The question has been much confused by misconception about the incidence of existing rates, but the following quotation from Professor Cannan's paper will bring out the main points at issue:—

‘The followers of Ricardo were apt to talk as if rent could not be wiped out. You might, they thought, transfer it from one person to another, or to the State, but not abolish it. Recently it has been observed that this is not quite true. Arrangements are conceivable which would have the effect of destroying rent by causing over-cultivation of the lands which, if not over-cultivated, yield a rent. It is clear that the rent of any land,

however productive, could be wiped out by the simple process of enacting that whatever rent there was should be given to all who worked on it, and then admitting all workers who offered themselves. Competition would attract just such a number of workers as would reduce the advantage of working on that land, rather than any other land, to nil; in technical language, returns would be diminished till the surplus or rent disappeared. Now if, instead of the land being thrown open to all workers who choose to come, it is let to a number of farmers in the ordinary way, but arrangements are made by virtue of which each farmer will be able to charge the aggregate rent of all the farms with the cost of some particular farming operations—say ploughing or harvesting—the net rent eventually reaching the owner will be diminished, since each farmer, being able to get this work done for nothing, will use more of it than is consistent with the best possible working of the land. It is just that sort of arrangement which the exemption of buildings from rating would establish in regard to what we may call urban cultivation. Over-cultivation, in its urban form of over-building, is encouraged by the provision of free services paid for by taxation of sites only, and so the surplus in the form of site values is diminished."

The advocates of site value taxation have laid themselves open to this criticism by trying to make too much of some imperfection of the existing rating system and speaking as if the one thing to be aimed at was to find a substitute for existing rates. That would be, as Dr. Cannan says, like subsidising some particular farming operations out of rents, and would lead to wasteful use of these particular operations. But let us return to the earlier part of the quotation in which is pictured a farming community sharing the aggregate rent amongst the workers, and admitting all who care to come. That, it is said, would lead to over-cultivation. Similarly, if the aggregate rent of town lands were shared by the townspeople, the conclusion is that there would be a wasteful aggregation of people in large towns where the cost of housing and other services is excessive. In Dr. Cannan's words, "What is taken from site values is simply slopped away in increased cost."

If there were no further explanation of urban rent than the simple Ricardian theory as applied to agricultural land, this conclusion would follow. But the all-important fact has been lost sight of, that high site values in a town are not due to the inherent properties of the soil, but are, in the main, caused by the fact that many people have come to live in the town. That

makes all the difference. To return to the agricultural parallel, it is always tacitly understood in explaining the theory of rent that the cost of production and the amount of produce obtained for a given expenditure by any one farmer is independent of what is happening on other farms. But suppose your various farms A, B, C, D, &c., are so situated that the cultivation of B, C, D, &c., renders easier the cultivation of A, and the cultivation of A, C, D, &c., helps the cultivation of B, and so on. It does not matter exactly in what way—it might be by some effect on climate or rainfall, but more likely by permitting greater economy in the division of labour, more specialisation, mutual rendering of services, lowering of cost of transport, &c. If that is the case, individual ownership and individual appropriation of rent would not lead to the most economical production, but would lead to under-cultivation. Each person considers, in deciding to what degree of intensiveness to cultivate, the marginal return which he can appropriate for himself, as against the marginal cost to himself. He does not take account of the incidental advantage—small in depth, so to speak, but wide in area—which further cultivation of his land confers upon his neighbours. Such a situation involving the failure of self-interest to produce the best results, is evidently indicated by Mr. Pember Reeves in his book on *State Experiments in Australia and New Zealand*, where, speaking of an unfortunate deadlock in the settlement of people on the land in New Zealand, he remarks, “Prices (of land) could not rise until a good proportion of the land was cut up and settled. The owners could not afford to cut it up until prices rose.”¹ When land value arises in this kind of way, as is the case in cities in England even more than in agricultural districts in New Zealand, the pooling of rents would be advantageous to production. Marshall has pointed out that where the law of increasing returns operates, it may be theoretically advantageous to give a bounty. Individual self-interest would not lead to the most advantageous volume of production. It is this principle, in a somewhat more generalised form, that can be applied. The provision of utilities may take place under conditions which, I have suggested, might be termed co-operative and anti-co-operative. They are not very attractive terms, but I use them in the absence of any other words, in order to avoid frequent circumlocution. By co-operative conditions I mean either (1) that increase of output by any producer tends towards a reduction of costs for other producers, covering the case of Marshall’s “external economies,”

¹ Vol. i. p. 270.

and distinguishing from the law of increasing returns as applying to a single producer; or else (2) conditions such that the satisfaction of one person's demand adds to the enjoyment of other persons, as, for instance, when a man builds a beautiful house for his own pleasure he incidentally affords satisfaction to all passers-by. By anti-co-operative conditions I mean the opposite of co-operative. Either every producer gets in the way of all the others, as I have suggested is the case with speculative dealing, or else each person in satisfying his own desires incidentally diminishes other people's satisfaction—as, for instance, by lighting a fire for my own comfort I do something towards spoiling the atmosphere for everybody else, or by building an ugly house I give annoyance to all my neighbours.¹

The possibility of these conditions of production and consumption, and the failure, in either case, of individual self-interest to lead to maximum satisfaction, has been recognised by theoretical writers for a number of years—to some extent by Marshall and more fully by Mr. Henry Cunyngname and Professors Edgeworth, Pigou, and Chapman. I only differ from them in regarding the recognition of these conditions as of urgent practical importance, especially in relation to urban land values. Progress depends largely on a more critical examination of the working of self-interest in relation to the interests of society with a view to action in cases where they do not harmonise.

It would be an interesting, but difficult, undertaking to endeavour to discover all the various ways in which aggregation of population brings into existence either co-operative conditions or their opposite, and the more completely this can be studied the better. But it is not at all necessary, and this is a point which needs particularly to be emphasised, that we should be able to do this, excepting in regard to pronounced and obvious cases. The advantages of aggregation may consist simply in opportunities for greater division of labour all round, affecting almost every method of satisfying wants. Without going into difficult and detailed inquiries, we can conclude, from the mere fact that land values grow with growing population, that on the whole co-operative conditions exist in a marked degree.

As regards the opposite conditions, it is perhaps more necessary they should be specifically recognised in order that they may be deliberately counteracted. And, as a matter of fact, the most important cases of anti-co-operative conditions have been

¹ This instance is merely given as an illustration of the principle. It is not suggested that in every case the matter is sufficiently urgent to justify public regulation.

recognised for a long time. It is recognised that to leave each household to dispose of its own refuse does not conduce to the maximum advantage of society, and other cases of less urgency are now being dealt with by legislation, such as the Town-Planning Act.

This brings me to the consideration of the objection that to appropriate rent for local purposes would add more to the attractiveness of large towns than of small towns; and of all towns than of rural districts, and cause an undesirable congestion of population. The answer is that the rent of large towns should not be used to add to their attractiveness simply by lowering burdensome rates without any attempt being made to remedy the evils of congestion. Let us imagine that there is only one kind of cumulative advantage from aggregations of population—very pronounced cheapening of retail distribution of food—and one kind of cumulative disadvantage—smoke, also very pronounced. Everyone, let us say, uses very bituminous coal. Each person's fires do something to poison the air, but no one would gain anything worth considering by checking the smoke from his own fire. You could leave these two forces to fight against each other. Some limit would be reached in the size of a town, at which further growth would be stopped by the smoke nuisance. If it were proposed to tax site values in order to render the town more attractive, without, however, doing anything to check the further increase of smoke in the air, there might be valid objections. But if at the same time steps were taken to discourage the use of bituminous coal, to offer a bounty, perhaps, to encourage the use of non-bituminous kinds, a more advantageous equilibrium position would ultimately be found than that which resulted when cheapness of food and unpleasantness of smoke were merely left to balance one another.¹

The kind of uses which should be made of the revenue obtained may be best imagined if we picture a country in which every town is owned by a company which receives the ground rents and is forced by the competition of other town-owning com-

¹ An important recognisable instance of anti-co-operative conditions is found in the case of space for recreation. One reason, at any rate, though not the only one, why the supply of adequate room for children to play in cannot be left entirely to the self-interest of the parents, is that every person in consulting his own interests (assuming that he includes his family) does something unwittingly to diminish the enjoyment of others when he comes to live in a town. He causes houses and roads to take the place of fields and lanes, and makes it a longer journey for everyone to get into the country for a change. This cannot be prevented if the advantages of urban conditions are to be obtained, but the serious disadvantage to children's health can be mitigated by the provision of open spaces. Such a use of income derived from site value was recommended by Marshall.

panies to give away all, or nearly all, of the revenue beyond what will pay ordinary dividends, in some form of benefit to the inhabitants. Obviously, there would be no ear-marking of site value rent for any specific services. One may compare, also, the case of a theatre, in which some seats necessarily are worth more than others. The differential values of the seats do not give rise to economic rent. They are all pooled, and the theatre as a whole has to compete against other theatres. Some, no doubt, are more profitable than others to their proprietors, and in the country where all towns were owned by competing companies, no doubt some would yield a certain amount of surplus above normal profits, owing to peculiar advantages of local situation. But the greater part of the advantages arising from mere aggregation would be such as could be duplicated almost anywhere, and competition would force the proprietors to give away all such advantages to the inhabitants. The greater part of site value would thus be given back, in some form or other, but, of course, it would not be given in the form of low rents in the centre of the town. Differential advantages would still lead to differential charges, just as in the case of seats at a theatre or cabins on a steamer.¹

This line of argument in favour of taxing site values has been recognised to a certain extent by economists, but it has not been accorded much weight. Marshall's plea for the "fresh-air rate" already referred to is in line with it; so is the principle of betterment. Professor Edgeworth, in the *ECONOMIC JOURNAL* for 1900, refers to the more popular way of putting the argument, *i.e.*, that since land values are caused by the activity of the community, the community should have them, but does not seem to attach much weight to it.²

Other economists for the most part ignore the essential difference between simple Ricardian rent and urban land value, and see nothing in the taxation of site values but a mere transference

¹ From the nature of the case some seats are nearer the stage than others, and some cabins are better situated than others, but whatever producers' surplus there may be in connection with theatres or steamers has no close connection with the magnitude of the differential advantages of particular seats or cabins.

² "That labour has a right to what it produces is hardly relevant here, since the increase of ground rent was not the motive for the sake of which cities were formed and improved. It is a bye-product, like acorns on oaks which were planted solely for the sake of timber. Does justice demand that we should plant the acorn in the place where it has grown, if the parent forest is already too dense?"—Edgeworth, *ECONOMIC JOURNAL*, Vol. 10, p. 498. But if the acorns are an important and valuable crop, there will be less planting of oaks than is useful if those who plant are not able to appropriate the acorns. And we ought to assume that the production of acorns is dependent on the aggregation of the trees to a large extent in order to make the parallel good.

of wealth from certain persons to the State.¹ Or else, like Professor Cannan, they argue that the effect on production would be bad.

Professor Pigou, in his pamphlet on *The Policy of Land Taxation*, quotes Professor Cannan mainly with approval, but is not averse to applying revenue derived from taxation of site values to the relief of such burdensome local rates as the poor rate, and he argues that as this would absorb more than the proceeds of the land taxes which he advocates, there is therefore no field for the application of Professor Cannan's argument. But the application of that argument, and similarly of the converse of it presented in this paper, depends, not on the amount of the revenue raised or the particular local use to which it is put, but upon the principle on which it is distributed. Are the high site values to benefit the places in which they occur?

It may be contended that in the case of large towns, especially metropolitan cities like London, the growth of site value is not to be attributed entirely to the local aggregation of population, and that, consequently, the argument for local application of economic rent does not apply. It can hardly be doubted, however, that to a large extent site value in London is dependent on local aggregation. Still more is this the case with provincial towns. But there is a further reply to this objection to the local application of revenues from land value. Suppose further growth of site value in London to result entirely from increasing demand by the outside world for the services of London bankers. The increased site value should then go towards improving the quality or lowering the cost of banking services. That is how the rest of the world should gain, provided that the advantages of London over other places arise, as is substantially the case, from the mere fact that much banking is concentrated in London, and not from purely natural physical conditions.²

¹ That is the conclusion to be deduced from what might be called the economics of flat-land, in which the interaction of supply and demand is pictured as the intersection of two curves on a plane surface. But when rent is the result of conditions of the kind under consideration, we have to think in three or more dimensions.

² Perhaps this point can be made clearer by taking an imaginary parallel case of simple physical production such as the forests producing timber and acorns mentioned by Professor Edgeworth (see footnote, p. 13). Only some modification is necessary in order to illustrate the point under consideration. Let the centre of the forest be best adapted, not owing to the nature of the soil, but merely because it is the centre of the forest, for producing chestnuts, and the value of the chestnuts (or the quantity, if we prefer) be supposed dependent not only on the increase of oaks in the forest in question, but on the growth of demand elsewhere. It still remains true that the site value of the centre should be used to meet the general expenses of the forest, only part of it should be allocated specifically to the

My conclusion, therefore, is that there is a strong theoretical case for the local appropriation of urban site value, on the ground that when those whose activities produce a value are able to appropriate that value, production is more efficient. It is not a mere question of transferring a certain amount of wealth, unaltered in magnitude, from some people to others, and recognition of that fact makes all the difference in our attitude towards the equity of taxing land values. There is an expectation, well founded, that the public will gain more than the land-owners lose, and there is no actual certainty that the latter will lose at all in the long run as the result of a moderate and gradually introduced scheme such as that recommended by the minority of the Royal Commission on Local Taxation.¹ Regard for the interests of tenants of property situated on valuable lands must prevent any violent change of the rating system, and it is not even ideally desirable, if one were starting, for instance, with a clean sheet; that buildings should be entirely exempted from local rates. But recognition of the fact that the best development of urban life would be obtained if each town (including the surrounding suburbs) were able to devote most of the rent of land to improving the attractions of the town, is the point of crucial importance in determining our attitude towards reform of local taxation. In this direction, rather than in that of National Finance, can a decisive case be made out for Taxation of Land Values.

C. F. BICKERDIKE

improvement of production and cheapening of price of chestnuts as distinct from oaks or acorns.

¹ Or the local application and gradual increase of the increment tax, since that principle has been adopted. It is not the purpose of the paper to discuss the best methods of carrying out land value taxation in practice.

PUBLIC LOANS IN THE LIGHT OF THE MODERN THEORY OF INTEREST.

I.

THE connection between the rate of interest and the course of prices has become gradually clearer through the studies of various economists, but especially through recent American researches. It throws light on the practical business of raising loans for public works; but before entering on the discussion of it, it is necessary to recall and summarise the historical facts.

The facts are given in tables and diagrams later. All that is needed for the moment is a brief account in words of what the statistics indicate.

(i.) There is first the course of prices. Prices in England are chosen, not only because this paper deals chiefly with English affairs, but because, owing to free trade, prices in England are not complicated by tariff considerations; they therefore have more world-wide significance than those of other countries. The actual figures taken are the averages given by Mr. Sauerbeck for many articles dealt in wholesale; and they are given in two forms, annual and decennial. The annual numbers, of course, show the greater fluctuation; they are especially affected by cycles of good and bad trade, which usually last less than ten years, and the diagram shows accordingly numerous peaks and depressions. On the other hand, the decennial average (from 1887 to 1896, from 1888 to 1897, and so on) obscures those influences, and yields a diagram showing slow, steady movements which extend over many years.

The curve of annual numbers (Fig. 1, A) is chiefly marked by ups and downs lasting from seven to ten years. It has been supposed by some that this periodicity is due to astronomical causes influencing the world's harvests. However this may be, the fluctuation itself is indubitable. To bring it out more clearly, the curve marked "difference" (Fig. 1, c) has been drawn; this

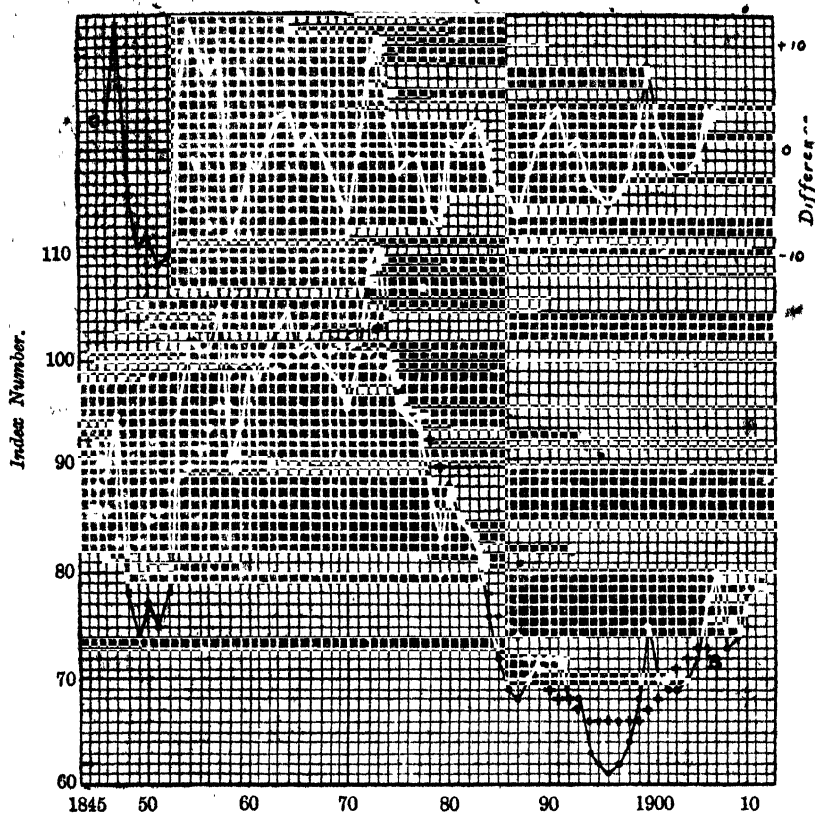


FIG. 1.—Sauerbeck's Index Number.

- A Annual numbers —————
 B Decennial averages (that for 1840-49 set at 1845, and so on) + + + + +
 C Difference (A minus B).

shows the excess of prices in any year over the average for the five years preceding and the five following. Here the long period changes are eliminated, and the short stand out in relief.

The curve of the decennial price index may be described quite simply. It was falling rapidly until the discoveries of gold in California and Australia. It then rose rapidly until about 1859, when the expansion of trade had overtaken the gold supply; and remained about constant till 1873. After that the world's demand for gold continued to increase, whilst the supplies shrank, and a long period of falling prices ensued. This was only stopped about 1894, when the Witwatersrand mines had come into full activity. Since then the supply, including new discoveries in West Australia, Klondyke, and elsewhere, has increased enormously, and prices have risen.

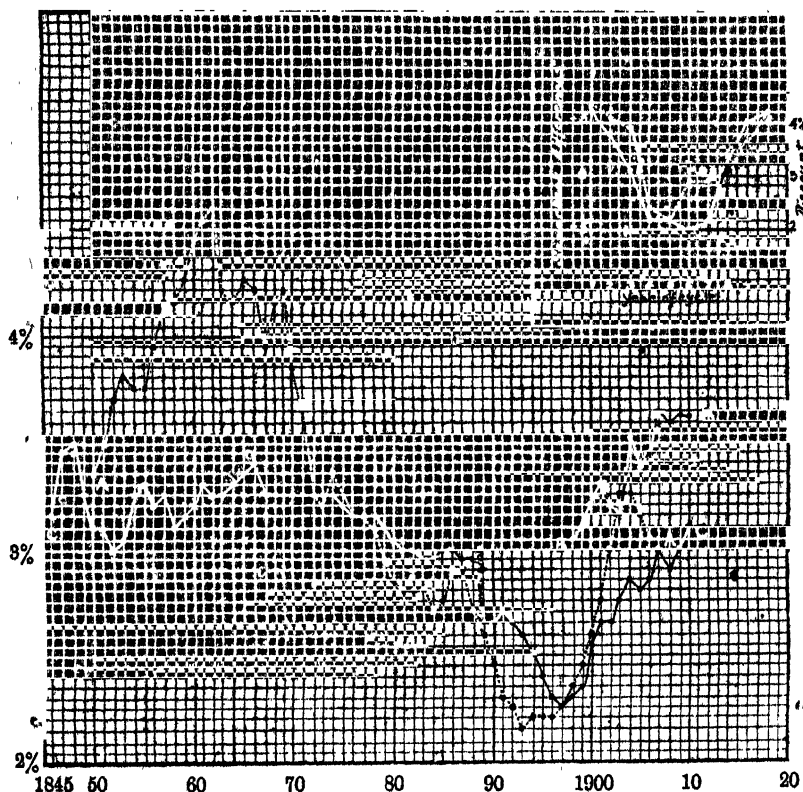


FIG. 2.

- A London market-rate of discount, decennial average (1850-59 set at 1855, and so on).
 B ——— Rate of issue, per cent., of Colonial loans.
 C ——— Yield on Consols.

Inset—

——— Periodic average of Sauerbeck's "differences." discount rate.

(ii.) The rate of discount in London. The "market rate," rather than the "bank rate," is chosen, as it expresses better the true cost of loans; complaint has often been made of late years that the bank rate has no close connection with the real state of the market. The annual figures give an even more zig-zagging curve than those of price. Decennial averages have therefore been taken (Fig. 2, A). It may be noticed from this figure that the rate of discount, which was moderate at the time of the Californian discoveries, rose very high in the years following, and only fell again when prices had been for some years stationary. Later, in the 'eighties and early 'nineties, the rate fell further—the average for the year 1895 was actually less than 1 per cent. It

recovered subsequently, and has of late been slightly above 3 per cent.

(iii.) The discount rate shows the value of loanable money for periods of a few months. To get the value put upon it in the case of permanent investments other data must be used, and among these the price of Consols. In the opinion of the present writer this is an untrustworthy guide, for Consols have had such a special usefulness for bankers that they are sought after at prices which even the excellence of the security does not justify. Of late they have lost something of their unique prestige, and their price is tending downwards to that of other first-rate securities giving the same nominal return. The curve shows a break in 1888, when the 3 per cent. stock was converted to $2\frac{3}{4}$ per cent., falling automatically to $2\frac{1}{2}$ per cent. in 1902. In calculating the yield between these two dates, the present worth of the temporary extra $\frac{1}{4}$ per cent. has been allowed for.

The yield on Consols (Fig. 2, C) chiefly differs from the discount rate in that Consols did not respond to the great rise in the 'fifties and 'sixties, and that they were slow in following the great fall in the 'eighties and early 'nineties, and the recent rise. Slowness of response is to be expected, for Consols stand for interests of a more permanent character than even a ten-year average of bill discounting. The interesting fact is that the fall in the yield of Consols was of about the same extent as that in discount, although taking some four or five years longer to be accomplished, and that the same is true of the recent rise, so far as history has yet revealed itself. The earlier circumstance—that Consols during the two decades, 1850 to 1870, kept nearly stationary, and never yielded $3\frac{1}{2}$ per cent. when discount had long been above 4 per cent.—is no doubt due to the peculiar estimation in which British Government securities were then held, and which withdrew them somewhat from ordinary economic influences. Nowadays Consols have to suffer the chances of history, much like other stocks and shares.

(iv.) Colonial loans now afford practically perfect security, and new issues are often made. It is possible, therefore, to get an average based upon actual new demands for money, which is better than trusting to the mere transfer of old loans from hand to hand, as represented by Stock Exchange prices. This has been worked out for the last dozen years (Fig. 2, B), and the result should be compared with the curve of yield on Consols. Further back than that the comparison would be useless, as the credit of the Colonies was not then considered first-rate—particularly

at the time of the Australian bank difficulties in the early 'nineties.

II.

The varying rates of interest charged to borrowers depend partly on general causes affecting the whole loan market at once, and partly on the individual credit of the borrower. The latter need not concern us now to any great extent; it is rather the action of general causes that we wish to study. Economists usually distinguish between the true rate of interest, for the use of capital, and the element of insurance against possible loss of capital. In securities of the very highest class the risk of loss is regarded as negligible, and the whole payment made is of the nature of true interest. Many securities have been tending towards that position of late years. During peace, at any rate, default on the part of a Government has become rarer and rarer; now none but the worst of Central American Republics would repudiate its debts, and even they are making serious efforts to become credit-worthy—so advantageous is it to have a good reputation. We seem to be approaching a period when all Governments will pay their obligations with the regularity of an English bank, though there remains the possibility that some world-wide conflagration of war may reduce even well-intentioned States to bankruptcy. In looking over the history of investments, then, a more or less steady fall in rates is seen, due to the improving credit of individual borrowers; but this must be distinguished from the variations due to really general economic causes.

Turning to perfectly sound borrowers, against whom no insurance premium need be charged, fluctuations in rate occur chiefly from three causes: (i.) changes in the normal rate of interest; (ii.) changes in the value of money; (iii.) changes in the activity of trade. Let us take these in reverse order, beginning with the most transient changes.

It is a familiar fact that trade goes through cycles of a few years' duration; it slowly improves, till the improvement becomes so noticeable as to lead to speculation; this leads to a boom, then a collapse, and then, after a period of dullness, the cycle is repeated. During these changes, the immediate rate of interest varies considerably; this is seen in the discount rate (Fig. 2, A), the demand for bills and short loans being far greater in the phase of speculation than in that of dullness. It is naturally more difficult to float new long-date loans when there is a great

demand for short loans, and the discount rate is high; but the influence on the rate of interest is not great, as everybody knows that a boom in the discount market will not last long, and will not serve as a substitute for permanent investments. If the curves of "market discount" and "price difference" (Fig. 1, C) be compared, a very marked similarity will be found, showing how trade cycles are characterised by coincidence of high and low prices with high and low discount rates;¹ but if either of these curves be compared with that of the yield on Consols, only faint traces of trade cycles will be distinguished in the latter—hardly more than one-tenth per cent. change in interest seems to be attributable to trade booms and slumps.

We need not dwell, then, on this point, so far as prices of investments are concerned; and we come to the influences of changes in the value of money. These changes, as Fig. 1.B shows, have been, lately, for twenty or thirty years in one sense, and then in the reverse; not that any regular periodic character is to be expected of them; there have been times in past history when an appreciation or depreciation of money has lasted a century. This is not the place for a discussion of the causes of the change in the value of money. What we are concerned with is the way in which the current rate of interest is affected by these slow changes in general prices, to whatever cause these changes may be due.

When prices are rising, the profits of trading are increased abnormally, and there is a wide demand for borrowed money to trade with, and similarly falling prices cause a restriction in the demand for loans, and a fall in the rate of interest. As a crude illustration, let us suppose that a manufacturer wishes to borrow a thousand pounds from the bank to buy raw cotton, expecting to sell the finished cotton goods a year hence; and that in normal times he is willing to pay £40 for the accommodation. Now, if during the year prices in general have risen 2 per cent., the raw cotton he bought will be worth £1,020, and in selling his manufactures he will be able to charge £20 more on that account. The actual rise in price of the cotton goods will probably be more than £20, since they will be worth much more than £1,000; but the remainder of the rise we may suppose offset by increased wages and other expenses. Two per cent. profit on the value of the raw material will remain to the manufacturer, and his net profits accordingly will be £20 more than he expected. If he

¹ For a recent study of short period fluctuations, see H. S. Jevons, "The Sun's Heat and Trade Activity" (1910).

thinks the rise in price likely to continue, he will be eager to renew the bargain, and if the competition of other manufacturers makes loan money scarce, he will gladly pay something more than £40 for the use of the capital. On the other hand, it is clear that if during the year prices fall, his profits will be eaten into seriously, even if he economises in wages and other ways; the manufacturer will be chary of borrowing again, and will rather allow his business to be restricted, unless he can get the money at an unusually low rate. The outline of this theory is given in Marshall's *Principles* (1907 edition, p. 593), and it has been worked out at length by Professor Irving Fisher and others.

The illustration is, of course, very crude. On the one hand, it does not allow for the fact that wages do not respond very rapidly to change of price; on the other, it assumes a power of forecast on the part of the trader that he does not possess. If the response to economic circumstances were immediate and complete, and there were no disturbing causes, the theory might be put into exact form thus:—"The current rate of interest will be equal to the normal rate, *plus* the rate at which general prices are rising (or *minus* that at which they are falling)." In the case of the cotton manufacturer above, the normal rate being 4 per cent., and the annual appreciation 2 per cent., the current rate of interest should be 6 per cent., whilst, if prices were falling 2 per cent. every year, the current rate of interest should be 2 per cent.

It must be remembered that the rule so stated is complicated by other things in practice. In the short period changes due to trade booms, very great fluctuations in the interest on short loans do occur; the discount rate has been known to drop from 7 to 2 per cent. in a year, though nowadays such violent changes are no longer found in England. But here the trader's concern in the matter is exaggerated, for in changes that only last two or three years there is no time for adjustment in rent and standing charges for machinery and office expenses, and not much for wages; hence he gets all the profit of the rise, and suffers all the loss of the fall in price.

In the longer period effects, due to changes in the supply of the precious metals, those adjustments can be better made, and the uncertainty of the future comes in as a more marked moderating cause. At the present time (1911) it is impossible to say whether the rise in prices which has, on the whole, lasted some fifteen years, continues still, or whether it has come to an end. Naturally, then, trade only follows the long-continued price changes after delay and to a limited extent; those who borrow

during a rise reap some real advantage, and only a part of the extra profit made goes to the lender as high interest; whilst if the rise continues for many years and interest rises so high that the business man's profits return to the normal level, the rate will probably remain high after the rise has stopped, and traders will only gradually realise that business has become unprofitable.

Thus we should expect that the rule stated above is followed only partially, and with considerable delay, in reality. Taking Sauerbeck's decennial price index (Fig. 1, B), we find the following rates of changes—omitting minor changes:—

1848 to 1859	...	...	Rising 1·8 per cent. per annum.
1859 „ 1878	...	...	Stationary.
1878 „ 1894	...	...	Falling 2·0 per cent. per annum.
1894 „ 1899	...	...	Stationary.
1899 „ 1906	...	...	Rising 1·5 per cent. per annum.

If we take the normal rate of interest on first-rate security, provisionally, as 3·2 per cent., the full application of the rule would require the current rate to have been, 5·0 per cent. in the 'fifties, 1·2 per cent. in the 'eighties, and 4·7 per cent. of late years. The actual fluctuations have not been so great as this; nevertheless the market rate of discount did stay, on the average, well above 4 per cent. for a long time after the early gold discoveries, and did fall to the neighbourhood of 2 per cent. towards the end of the period of gold scarcity. Since then it has recovered, but has not risen really high except for short periods.

As to the general agreement between theory and history, no one who studies the diagrams can doubt.

There remains the "normal rate of interest" and its fluctuations. To get at it we have left out, in turn, insurance against risk, trade cycles, and fluctuations in the value of the precious metal. It follows that we may define the normal rate as "the rate of interest paid by a borrower of unexceptionable credit, at a time when business is neither excited nor depressed, and the average price of commodities has been stationary for a number of years." This is the rate of interest discussed in the text-books of economics, and shown to depend on the relation between supply of and demand for capital. There is a common belief that the rate of interest shows a steady fall, as commercial civilisation proceeds; whether this is true or not can only be considered after the disturbing causes have been allowed for. Risk, certainly, has become less, and therefore interest seems to have fallen. But what the history of the "normal rate" has been is another matter, and one on which information is hardly available. As regards the last seventy years, the curves and tables show that

the change must have been very slight. An inspection of Fig. 2 gives the impression that in the middle of last century the normal rate may have been about $3\frac{1}{2}$ to $3\frac{1}{2}$ per cent., and that now it may be about 3 per cent.; but the statistics do not yield much more than an "impression." All that can be said with certainty is that the fall, if it exists, has been very slight. The opinion to the contrary that prevailed some twenty years ago was a false one, due to the fall in apparent interest produced by a fall in prices, and the business world is still disconcerted by the recent rise in apparent interest rates which has upset the opinion that was becoming general. One no longer hears speculations as to the chance of capitalists paying to have their money taken care of; but the fall in Consols and other first-class securities is still a source of bewilderment to many.

III.

This paper is not intended as a history, but as an attempt to see how far a reasonable forecast may be made for the guidance of borrowing Governments. For this, not only must the causes influencing the rate of interest be disentangled, but an estimate made of the probable course and importance of each. The matter will be looked at mainly from the Colonial point of view, and we shall leave out of account, therefore, the pressing, wasteful demands of war, which we may hope the Colonies will never have to meet.

Now the minister of finance has two problems to deal with: he has to raise new loans to pay for public works, and from time to time he may have to meet old loans which are falling due, and which he must either pay back or convert into new ones. The British and some other leading Governments have borrowed money without any promise to pay back at a fixed date, with the consequence that in times of depreciation of stocks there is nothing to maintain the price of their securities beyond the payment of interest. This has led to great loss and dissatisfaction, especially among small holders; and it is becoming recognised that a bond which promises repayment at par at a fixed date is a sounder and more creditable investment. It is a point in favour of the Colonial Governments that they have nearly always adopted this form of borrowing. They are reaping the advantage of it by getting a good name, and we may assume that the plan will be continued. Commonly the terms of the loan allow the Government to repay it for some years before. Thus New South Wales

in 1909 issued a loan which falls due in 1950, but is redeemable at par at any time after 1930, on due notice being given to the holders. We may take this as a typical form of security.

In the Colonies and new countries we may assume that public works are paid for by loan, and that old loans are not repaid, but converted on maturity. This policy is usual, and is regarded as sound by the most careful financiers, for it merely means that a Government with a growing business needs a growing amount of capital. All that is necessary is careful, conservative valuation of the Colony's assets, and provision of amortisation for those that depreciate; a permanent debt equivalent to the permanent value of railways, harbours, and other works must be regarded as normal in the present dispensation of things.

For loans of the usual Colonial type, the slow changes in price level are most important. Of the other two influences, trade fluctuation is too rapid to have much effect, though some consideration will be given to it below; and change in the normal rate of interest is too slow. It is, of course, easier to estimate the consequences of falling or rising prices than to forecast whether prices will rise or fall; but a certain guiding axiom may be proposed, to which attention is specially called, as the arguments that follow are based on it. This axiom, or rather postulate, is that *prices are more likely to tend towards a certain average level than to go indefinitely away from it.*

The price changes of the last two hundred or more years give support to the plausibility of the assumption. During the nineteenth century the extremes (on Sauerbeck's scale) were 111 and 67: the mean is 86 and the fluctuation 29 per cent. on each side of the mean. But the extraordinary disturbance of the Napoleonic wars is included in that period, and if one goes back through the eighteenth century, the changes will be found to lie between the same limits, though the information is less certain. Even throughout the seventeenth century, if the price of wheat be taken as a guide, there seem to have been no greater changes. During the most commercially prosperous period of the Roman Empire prices were not very far removed from those of modern times: it was only during the Middle Ages, when insecurity and barbarism had led to scarcity of the precious metals, that prices were very much lower. But if during the last three hundred years economic causes have tended to prevent any extreme rise or fall in the value of money, although there was neither any clear conception of the advantages of stability, nor organised effort to get it, one may hope for even greater steadiness in the future. The community has

very great interest in possessing a stable currency, which maintains its value steady from year to year, and favours neither debtor nor creditor in the paying back of loans : the community is gradually becoming conscious of this, and is tending more and more to exercise conscious control over the currency through banks and otherwise. In view of this, it does not seem too much to assume that fluctuations will, on the average, and in the long run, be corrected rather than aggravated.

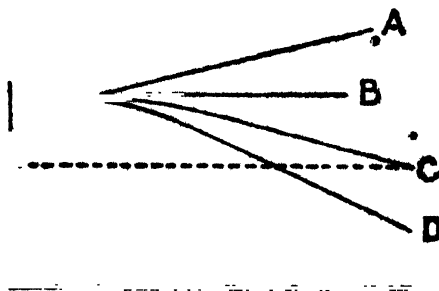
To what precise level the currency may be expected to tend, is another question. The average of the last ninety years, for which Mr. Sauerbeck has worked out index numbers, is about 90 (100 on his scale means the average for the arbitrarily chosen period 1868-77). Since 1880 prices have been consistently lower than this, so that although they have been rising of late, it is not fair to consider them high, as yet. If there should be a definite effort, in the future, to stabilise the price level, and if it should be successful, we might expect something near the modern average to be chosen—lower probably than 90 on Sauerbeck's scale.

Suppose, then, a loan of a million, at forty years, to be made. To understand the nature of the contract, first suppose that prices have been for some time constant, and remain so, through the entire currency of the loan. The interest will be normal. We will say, for convenience of discussion, three per cent., though no importance is to be attached to the actual figure for the moment. Then the borrower receives one million in cash, and pays £30,000 a year for forty years, and finally pays the million back. The present worth of these payments, reckoned at 3 per cent., is £29,100 for the first, £28,250 for the second, and so on, £9,200 for the fortieth, and £306,000 for the final repayment (the "reversion") : the sum of all these amounts is, of course, precisely one million.

Now suppose the index number rises slowly throughout the period, say at the rate of one half per cent. per annum. Then each payment by the debtor is made in a depreciated currency. Every £201 he pays at the end of the first year will only buy as much as £200 at the time of the loan, and is really worth no more than that. The present worth of the payments is £28,950, £27,950, &c., and this particular series amounts to £883,000, so that the debtor has really made £117,000 net out of the transaction. The actual course of the index number here is assumed merely for arithmetical simplicity, and is not likely to occur in practice ; but the principle is clearly illustrated by it. Similarly, if the index number falls, the creditor gains a corresponding advantage.

So far we have supposed prices to be stationary when the loan is made, and to change afterwards. But if they are not—unless, in fact, they have been stationary for a considerable period before the loan is floated—another disturbing influence has to be allowed for. The rate of interest will not be normal. Thus, if the loan were contracted about 1865, assuming the borrower's credit to be thoroughly good, and still taking 3 per cent. as the normal rate, it is probable that $3\frac{1}{2}$ per cent. would have been paid, as the activity of trade was making money comparatively scarce. Whilst in 1895, with falling prices, and a very low discount rate, the money might have been borrowed at $2\frac{1}{2}$ per cent. In fact, at the time of issue prices may be (i) high, (ii) medium, or (iii) low, and any one of these conditions may be combined with that of (i) rising, (ii) stationary, or (iii) falling prices: making nine initial conditions altogether. What are the probable results of loans made under these circumstances (still taking only the long period changes into account)?

Small diagrams of the course of prices will help us to grasp the conditions. Let a dotted horizontal line be taken to indicate medium price level. If we start from the "high and rising" condition, we must expect, in accordance with our postulate, that the curve is more likely to fall afterwards than to rise much more. Accordingly, of the different continuations sketched below A is the least likely. B, C, and D are all possible, but of the



three, C, being intermediate between the others, should be chosen as the best guide to results. A Finance Minister basing his expectations on curve C is less likely to be seriously wrong than one adopting A, B, or D.

But a borrower on a high and rising market will almost certainly have to pay a high rate of interest. It is a well-established conclusion that, when prices begin to rise, the rate of interest on short loans does not at first rise much. The apparent rate (i.e., the rate quoted on the money market) is perhaps a

little high (or money apparently dear), but the real rate consequently below the normal (or money really cheap). It is this fact which gives such a stimulus to trade at such times. But the condition "*high and rising*" implies that prices must have been rising for a considerable time: the rate for short loans will have had time to adjust itself to the rise, and will have become so high that it is as much worth the lender's while, as three per cent. would be when prices were stationary. Now if this is so—if, say, 4 or $4\frac{1}{2}$ per cent. is quoted in the discount market, and has been quoted for a considerable period, the borrowing colony will have to pay not quite as much as that, but a high rate—perhaps $3\frac{1}{2}$ to $3\frac{3}{4}$ if its credit would normally entitle it to 3 per cent. It appears then, that the colony that borrows at such a time is burdening itself very heavily, for it has (i) to pay more than normal interest, and (ii) to pay it in a currency which soon becomes appreciated, as curve C shows, and so involves more real sacrifice to meet the obligations. For instance, if India had borrowed a million in 1872, on bonds repayable at thirty years date, she would have had to pay $3\frac{3}{4}$ per cent. And the subsequent history of prices shows that the interest payments of £37,500 a year would have been equivalent, in the currency of 1872, to these amounts:—

1877, £43,500; 1887, £49,000; 1897, £62,000;

and the final repayment of a million in 1902 would represent as much real wealth as £1,580,000 in 1872. The true present worth in 1872 of all these payments, reckoned according to the normal rate of 3 per cent. is in the light of subsequent history £1,625,000. This is what India would have paid for the use of a million. It appears then, that when the index number of prices is high and rising it is a very bad time indeed to issue public loans.

It should be noted, too, that although loans for thirty and forty years have been spoken of, it is the earlier years that count for most, so that prescience has not to be carried to the impossible lengths that might be supposed. If a million is borrowed for forty years at 3 per cent., the annuity has a present worth of £694,000, the "reversion" (lump sum repayable at the end of the period) only £306,000. Half of the present worth lies in the first twenty-three years of the annuity. At 4 per cent. these numbers become: annuity £792,000, reversion £208,000, half present worth lying in first eighteen years.

Take next the condition "*low and rising*." This implies that the rise is only beginning, and has succeeded to a

period either of falling or of stationary low prices. In the former case, on account of the inertia in adjusting rates of interest, the rate is likely still to be low: and even if prices have been stationary, that condition is not likely to have lasted long, so that traces of the influence of the fall will remain. This was the state of things in the late 'nineties, when the lucky borrower got rates that were quite unjustified by the course of prices at the moment, and in succeeding years. The rise was not well enough established to enable creditors to get their due. Thus in 1898 India, the Cape, and New South Wales all borrowed at less than 3 per cent., and even in 1901 the British Government raised a war loan at less than $2\frac{3}{4}$ per cent. But as from about 1896 to the present day prices have been rising at about 1 per cent. per annum, money was really worth something like 4 per cent. when those loans were made. The first dozen years of interest have been paid in depreciated currency, and if the principal is repayable after a fixed interval of thirty or forty years, it is highly probable that that payment, too, will be made in money of less value than the money borrowed. A state of low and rising prices should therefore encourage the finance minister to borrow freely, if he can spend the money to advantage on public works.

It is needless to go through all the cases in detail, as the same principles apply to them. A brief summary of the consequences to the borrower will suffice:—

High and rising	Very bad	Medium and rising	Rather favourable	Low and rising	Very good
High and stationary	Bad	Medium and stationary	Normal	Low and stationary	Good
High and falling	Doubtful	Medium and falling	Unfavourable	Low and falling	Rather favourable

There is another way of looking at the matter, which helps to make it clear, although not giving any really new information. Suppose it is a question of borrowing a million, to construct a railway, that will cost just that sum, and take the conditions to be "medium and rising."¹ Several years of rising prices and good trade will have made discount rates rule rather high; and a colony of first-rate credit will have to pay $3\frac{1}{2}$ to $3\frac{3}{4}$ per cent. for money. If the construction of the railway be put off for a year it will cost more—say £1,010,000—on account of the rise in prices, and it is improbable that the money will be raised any more cheaply. But as it is a period of fairly active trade, railway traffic will be good; a railway, the construction of which is justified at all, would certainly yield at least 3 per cent. net. Accordingly we have

¹ So far as one can see this describes the condition of the year 1911 with respect to long-period fluctuations.

£30,000 profits and £10,000 saving in cost, to set against £35,000 interest. The immediate advantage lies in hurrying on the work, and there will be, further, an annual saving of £350 interest.

IV.

Short period price fluctuations, we have seen, exercise a minor influence on the rate of interest; but they affect the cost of public works, and should be taken into account—the more so as it is less difficult to foretell their course.

Trade cycles are not symmetrical. Their typical course is a rapid rise to a summit of activity, a break in confidence, a rapid fall, and then some years of stagnation, slowly developing again into a rise. To obtain a more precise picture, the figures for prices and discount rates, from 1846 onwards, have been analysed, with the following results. First, the period must be found; inspection of the curves, and trial, give this as nine years. Accordingly, the Sauerbeck "differences" (Fig. 1, C) were arranged in columns, the first for the years 1846, '55, '64, '73, &c.; the next for 1847, '56, '65, &c., and so on, and the average of each column taken. The annual average London market discount rate was treated similarly (not shown in curves):—

Year of cycle.	Price "difference."	Discount rate.
1	+6	4.25
2	+4	4.05
3	+ $\frac{1}{2}$	3.9
4	-4	2.4
5	-4	2.2
6	-5	2.95
7	-4	2.95
8	+1	3.05
9	+5	3.65

[The first year of the cycle is 1900 and every nine years before and after.]

The parallelism between the two sets of numbers is most clearly marked (see diagram inset in Fig. 2).

Now for the effect of this periodicity on borrowing. To isolate it from the effect of the long period changes already dealt with, the average purchasing power of money must be supposed constant. Then there is no need to consider the value of money at the date of repayment; it cannot differ much from the average, and it is impossible to say whether it will be above or below; by so much the problem is simpler than that of long period fluctuations. It is not even worth while to consider the course of prices during the earlier years of interest paying, although the present worth of those payments is large; for in the course of

nine years some payments will be made in a depreciated; some in an appreciated, currency, and whatever part of the cycle one starts in the result will be practically the same. There remain two considerations of importance—the nominal rate of interest on the loan, and the value of the money raised, at the date of spending.

The interest on Colonial loans for thirty or forty years naturally does not vary nearly so much as the rate for short loans, but it is influenced by the latter. Statistical evidence is hard to get, the number of loans brought out under similar conditions of credit from year to year being so small. But as one example it will be found, I think, that the curve for Colonial loans (Fig. 2, B) shows the influence of the rise in discount rates in 1900, and a perceptible slackening off about 1902 due to "cheap money," interrupting the steady rise brought about by other causes.

Immediately after the maximum of prices the discount rate tends to remain high, owing to liquidation of weak speculations, and a feeling of mistrust; but a year or two later the rate will fall, and is likely to remain stagnant for some time, whilst the business world is trying to recover confidence. Then is the time for a Colonial Government to make use of its excellent credit. A year or two after the collapse of a period of speculation and high prices there will be a good deal of floating money, and a scarcity of investments which prove attractive in the depressed mood of the capitalist. A Government can then borrow cheaply, and use the money to the best advantage on a well-considered and extensive scheme of public works.

This conclusion has been reached on purely business grounds. It is well to note that governments have often been pressed to undertake work at times of depressed trade for humanitarian reasons. Often there is a conflict between the two motives, but not here. The moment recommended for borrowing—a year or two after a crisis—is sure to be a time of short employment; so by borrowing then and starting useful works, a Government may enjoy the glow of satisfaction at relieving the distressed, and do profitable business at the same time.

Of course, in making practical applications of this present section, it will be remembered that this is not an epoch of stationary average prices; and that the influences of a long continued rise or fall is in most respects greater than that of short period fluctuations. The two must be considered together.

It may be objected that the arguments in this paper are altogether too speculative to be of practical use, despite the

postulate of currency stability; and that it is impossible to put off public works from one decade to another, as might be the consequence of waiting for a favourable state of the market. The reply is given partly in the foregoing paragraphs, from which it will be seen that even one year's postponement of a public work may have appreciable results, favourable or unfavourable. Further, those in charge of Government finances, and of great private undertakings, do study the money market. But the object of this paper is to show that a chance of low nominal interest is not the only condition to be observed; there are other economic considerations of equal importance for successful finance.

V.

The continuation or conversion of loans is not of so much moment at the present time, and may be dealt with briefly. Governments of the highest credit used to borrow without making any promise to repay the capital. When the rate of interest rises, there is nothing to sustain the price of such stocks, and the bad effect is seen in Consols especially. The City does not now like securities of this nature, and Colonial Governments have, very wisely, made a practice of borrowing for a definite term of years. This involves repayment or continuation, but as the credit of Colonial Governments has been steadily improving for the last thirty or forty years, the only loans that have fallen due so far (except a few short term bonds) are old 5, 4½, and 4 per cents. which have been replaced by 3 and 3½ per cents. The profits of such conversions are obvious, but they have nothing to do with the subject-matter of this article.

Later on the 3 and 3½ per cents. will fall in, and then continuation loans may just as well be at higher as at lower rates. The most practical point to note is that the borrowing Government should have some margin as to date of repayment. Ten years is enough, as it covers a trade cycle, and to take more than enough licence in the matter only tends to unsettle the mind of the investor and so to weaken credit. Thus a loan repayable in not less than thirty and not more than forty years seems a thoroughly satisfactory arrangement for both sides.

The most noteworthy conversion that had nothing to do with improved individual credit was that of Consols by Mr. Goschen. He took advantage in the happiest manner of the general influences, which had brought the rate of interest down to 2½ per cent., striking the moment for conversion better than he knew,

probably. The result has been an annual saving in interest of three millions a year, and now a low price, which is advantageous to the Government so long as it is paying back instead of borrowing. If this state of things were certain to continue, there would be nothing further to say. But some day Consols will rise again—when the gold production no longer exceeds the demand. Then repayment will cost more, and the right course for the Chancellor of the Exchequer, in trying to economise the taxpayers' money, is to anticipate such a rise by conversion to redeemable stock at a higher rate of interest. There is no hurry about this, for Consols may go lower yet; but it is possible to take advantage of the fluctuations of interest both ways, converting to a lower rate to save interest, and to a higher rate to save cost of repayment, alternately. A Government that made a practice of this, and got the reputation of an astute dealer on the Stock Exchange, would not, it is true, be well thought of by investors; and I do not suggest to the British Government to adopt such a policy. But one more conversion—to 30–40 year 3 per cent. stock—in the course of the next few years, would be no loss to the Government, and would improve its credit: a consummation all the more desirable as, unfortunately, the possibility of war loans cannot be left out of account.

Johannesburg.

R. A. LEHFELDT

November, 1911.

THE INCREASE OF POPULATION IN GERMANY.

I.

THE name of Robert Malthus, far from falling into oblivion in the course of time, is quoted with increasing frequency in latter-day discussions, and this is probably due, not so much to the inherent merits of the *Essay on the Principle of Population*, as to the importance and complexity of the problems which that work first brought within the range of scientific and practical discussion. For more than a century we have been actively concerned with these problems, and for this the credit must be very largely accorded to Malthus. But we are still very far from any solution, and for that neither Malthus nor any of his successors can be held responsible. The difficulties which stand in the way of solution are inherent in the problem itself. They are both theoretical and practical: they involve the fundamental abstract question of the importance of numbers as such, and they provoke the vexed problems of the ethics of the sexual relations. The facts concerned are, by their very nature, concealed from the public view; but enough is known to justify their recognition as important factors in the population question. The problems with which we have to deal belong partly to the domain of natural science, partly to that of economics. Their solution should furnish us with definite concepts in place of the Malthusian tendencies, and with exact quantities instead of nebulous magnitudes.

It would be impossible at this epoch to determine what exactly is the desirable number for the people of any particular nation. A fixed standard for different nations, even if we selected European countries at the same level of civilisation, would be even more unattainable. We could not find such a standard even if we were to select, and rigidly adhere to, a single point of view, and that point of view were the economic. Thirty to forty years

ago some leading German statistical authorities held that a population of between forty and forty-five millions was too large for the country. To-day many critics are of the opinion that sixty-six millions can very well be accommodated. There is even a widespread anxiety, since the population no longer increases at quite the same rate, respecting the exploitation of the available sources for increasing the means of subsistence.

And why this desire for the greatest possible numerical development? The cause is national vanity, the desire for national expansion, for raising one's status in the family of nations. This tendency has, however, to reckon with ideals that point in the opposite direction, which emphasise the quality rather than the quantity of life, and with the striving after a higher standard of living, ideals which are very much to the front at the present time. And, again, we have the reaction against modern economic institutions, views which do not go quite so far as Ruskin's, but are akin to them.

The anxiety which is finding expression just now chiefly in France, but also in countries such as England and Germany, takes its rise in national pride. It is noteworthy that this anxiety does not by any means arise only where the population has actually ceased to increase, as in France. It begins to manifest itself even where the increase in population is still considerable, and the condition above described still a thing of the distant future.

This anxiety becomes intelligible when we find that it generally coincides with the belief that the neo-Malthusian movement is gaining ground, and that a rapid development which would approximate to the French condition of affairs might ensue.

The actual success of the movement can, naturally enough, not be gauged by economic science. Even the data furnished by physical science are totally inadequate. Modern physiology appears hardly as yet to have attacked the question of what the normal fertility of a nation would be, under conditions where the number of births is determined by natural causes. It is only if this were known that the actual birth-rate of a country could indicate how much influence preventive checks, whether Malthusian or neo-Malthusian, may have exerted. The further question, how much each separate kind of check is responsible for, will certainly never be settled with any sort of precision.

We may next ask what foundation there is for the belief that neo-Malthusian checks have recently gained both in popularity and in effectiveness. They had been eagerly and frequently dis-

cussed even in the lifetime of Malthus.¹ By "moral restraint" Malthus meant, as he expressly stated in the last edition of the *Essay on the Principle of Population*, published during his lifetime (sixth edition, 1826), "a restraint from marriage from prudential motives, with a conduct strictly moral during the period of restraint." The idea of restraint in the marriage relation was foreign to Malthus' doctrine. He warmly repudiated the allegation that he advocated anything of the sort.

But the proposal of more direct checks on population was not long in coming from other quarters. James Mill's article "Colony" (1818), published in the supplement to the *Encyclopædia Britannica*, and his *Elements of Political Economy* (1821) threw out hints in this direction. The *Edinburgh Review* (in a review of Cobbett's *Cottage Economy*, Vol. 38), and William Thompson in his *Inquiry into the Distribution of Wealth* (1824), ventured on more than a hint.

A more outspoken declaration had in the meantime come from Francis Place in his *Illustrations and Proofs of the Principles of Population* (1822), and an active propaganda began in 1823. Robert Owen heard how small was the number of children in French as compared with English families. He visited France, and ceased to be afraid of too rapid an increase of the people in his communities.

The recent cessation of increase in the population of France is sometimes attributed to a complete, or at least very considerable, physical decline of the French race. The existing conditions might then be explained by physical, not by moral causes, and the phenomenon would bear some resemblance to the recent disappearance of a species of rose, which, oddly enough, bore the name of "La France." This view, however, seems to be very rare. The most modern French writer of importance who has expressed his views on the question (Jacques Bertillon, *La dépopulation de la France*, Paris, 1911), says: "We find, especially in the Cotentins, villages which are completely uninhabited and ruined. Fire, war, pestilence, floods, cyclones, the scourges most dreaded by mankind, could not have produced more terrible ravages. And this is the result of neo-Malthusianism obstinately put into practice." The same phenomenon is exhibited in a somewhat more pleasing light in the passage which

¹ James A. Field, *The Early Propagandist Movement in English Population Theory*. Bulletin of the American Economic Association, 4th Series, No. 2, April, 1911. Papers and Discussions of the Twenty-third Annual Meeting, St. Louis, Missouri, December, 1910. Pp. 207-236.

he quotes from Arsène Dumont : "Every section of the population has the birth-rate, not of the social class to which it belongs, but of the class to which it would wish to belong." Two small Norman towns, Lillebonne and Condé-sur-Noireau, both seats of the textile industry, afford a striking illustration. In Lillebonne the working man is perfectly resigned, and it does not occur to him that his children might enjoy better conditions than himself. Consequently the birth-rate is high. In Condé, on the other hand, the working man is educated, thrifty, and anxious to improve himself. His habit of thought is that of the small *bourgeois*, and accordingly his birth-rate is very low.

II.

An attempt has been made, generalising from the phenomenon illustrated by the example of Condé, to construct a theory which should refute the accepted doctrine that population increases with the increase of the means of subsistence. The attempt has met with very little success, for there is nothing incompatible between the accepted doctrine and the proposed new theory. The population of the German Empire could not have increased from twenty-five to sixty-five millions between the years 1816 and 1910, if the means of subsistence had not within that period increased sufficiently to provide for the very much larger numbers. This necessary causal connection is not in any way disproved by the fact that within the same period of time certain sections of the German population were led by an improvement in their circumstances, or by the prospect of such an improvement, to postpone marriage, or to limit the size of their families. If we substituted this last-mentioned tendency for the former, and so reversed the accepted theory, we should be guilty of a sweeping generalisation in glaring contradiction to the entire development of the human race, whose increase has ever been conditioned by the increase in the means of subsistence and by the possibilities of such increase.

The case is, however, different if, avoiding exaggerated generalisations, we start from the conditions recently developed in an extreme form in France, and strongly indicated in other countries. We are then confronted with the question, whether the growing desire for a higher standard of living, observed both in Europe and America, will not eventually stop the increase in population, as it has already done in France.

The possibility of such a development cannot be disputed.

But our investigation, to be of any scientific value, must take its departure from the actual conditions hitherto found to exist in each individual country. When these show that, despite some dubious symptoms, the increase in a country's population is, though slightly retarded, still very considerable, then the phenomenon in question need not be looked upon as a symptom of exhaustion.

And this for more than one reason. In the first place, the desire for a higher standard of living is, within reasonable limits, quite justifiable, even if it militates in some degree against numerical increase. In the second place, we can hardly conceive that the productiveness of our chief civilised countries should continue to increase at the same rate as within the past fifty or hundred years.

In the meantime, the increase of the German population, per mille, during the past forty years, has still been as follows :—

			Births.	Deaths.	Surplus.
1872	...	...	41.1	30.6	10.5
1908	..	...	33.0	19.0	14.0
1909	...	...	31.8	18.1	13.7

This development is eminently satisfactory. For although there has been a large diminution of births since 1872, yet the surplus of births over deaths has increased, because the death-rate has declined even more than the birth-rate. Progressive civilisation aims at precisely this condition of affairs, its ideal being to keep the maximum number of persons alive by waging an unrelenting battle against the death-rate.

This increase of population constitutes a problem for the nation's material resources, a problem which, so far as Germany is concerned, has hitherto been satisfactorily solved. Productivity has, so far, kept pace with increased numbers. The distribution of the national income among the masses has also been fairly satisfactory, for it is universally admitted, even by the party which stands most definitely for discontent, that there has been an improvement in the condition of the working classes. A positive proof of this may be found in the fact that the Social Democratic party has long since dropped out of its programme the article which contained Lassalle's Dogma of the Iron Law of Wages. Emigration has declined very considerably during the past thirty years. The number of German emigrants, which was 117,097 in 1880 and 220,902 in 1881, was no more than 19,883 in 1908 and 25,531 in 1910. This diminution is very desirable since the German emigrant cannot, like his English counterpart, settle

in countries related by ties of race and kindred to his own, but is more or less lost to the German nationality.

There are, however, new indications of diminished progress in the population of Germany. In Berlin, the number of births, per mille, were :—

1906	...	...	...	25·8
1908	...	...	...	23·9
1909	...	...	...	22·0

while the deaths were :—

1906	...	...	...	16·9
1908	...	...	...	16·0
1909	...	...	...	15·5

so that the surplus in 1909 had fallen to 6·5. The birth-rate fell between 1906 and 1909 by as much as 3·8, while the death-rate diminished by 1·4 only.

The Imperial Board of Health recently published statistics of the births and deaths which took place between 1901 and 1910 in German towns of more than 15,000 inhabitants, the aggregate of which represents 36 per cent. of the population of the Empire. In these the number of births fell from 33·6 to 26·8 per mille of the population, while the death-rate diminished by only 4·7. Hence in 1910 the increase of population in the urban districts was no more than 11·8, or 2 per 1,000 less than the average for the Empire.

Are these indications of a slower increase of population to be regarded as alarming? This can certainly not be proved, and hardly even maintained, since the phenomenon admits of adequate explanation on the grounds already referred to. It points to a higher standard of living, for which the people of the German towns, and especially the large towns, are very eager, and it does pioneer work for the improvement of the public health. This movement has been specially vigorous in Germany of recent years, and the popular opinion that prices have risen very much during this period is largely a confusion between raised prices and heightened requirements. For the majority of commodities (exclusive of monopoly goods, which have indeed been subject to a great rise in value) the possible variations in price are confined within somewhat narrow limits. But the human desire for better conditions of living, the imitative impulse which drives men to follow the example of those more fortunately situated than themselves, is much more powerful and not nearly so easily held within bounds as the movement of prices. Indeed, so far as the middle or lower sections of the population are concerned, there

is ample room for the development of requirements in a reasonable direction.

Moreover, the absolute amount of the German population is already very high. The inhabitants number 120 to the square kilometer (1910), as compared with barely seventy-six in the year 1871, and with seventy-three in France to-day. It is probable that the number will continue to increase, even if not quite at the same rate as during the last decades. An approach to ninety or even a hundred millions by the middle of this century is not improbable at the existing rate of increase. But even if this expectation were not to be realised, if the population were to increase more slowly during the next thirty to forty years, so that in 1950 a total of only eighty millions were attained, the national pride might still regard this as a brilliant achievement in comparison with the French conditions. And such a result may confidently be looked upon as within the power of German productiveness, since the nation, unlike France, is quite resolved upon great progress.

Thirty or forty years ago, and more especially about the middle of the nineteenth century, a great deal used to be said about the dangers of over population in Germany and other countries. To-day our views on the whole subject of numbers and future development have been transformed. The great progress achieved by the last generation has upset prevailing opinions. Not only have favourable experiences destroyed the bogey of over-population, not only have we been convinced that we can provide the means of subsistence for a much larger population, but we have developed, quite apart from the measures taken by individuals to increase their own share of the world's goods, a national ideal of progress both as regards the quantity of life and the quality of its sustenance.

A different thing from the fear of over-population is the dislike which we find among certain political parties in Germany for an increase in the numbers of those who must inevitably be occupied in manufacture instead of in agriculture. Already not more than about one-fourth of the population of the Empire is employed in agricultural pursuits. A large increase of the population therefore signifies an increasing approximation in this respect to the conditions with which we are already familiar in England. Nevertheless, this view held by isolated groups (and by individual economists who agree with them) has not proved a serious obstacle to the recent development of the manufactures and commerce of the German Empire, nor is it likely to do so in the future.

The importance of the manufacturing population from the point of view of the progress of numbers is shown by a comparison of manufacturing and rural districts in this respect :—

Inhabitants per Square Kilometer.

	1871.	1910.
Westphalia	87.8	204.1
The Rhine Province	132.6	263.8
Saxony	170.5	320.3
West Prussia	51.0	66.7
East "	49.3	55.8
Pomerania... .. .	47.5	57.0
Mecklenburg-Schwerin	42.5	48.7
Mecklenburg-Strelitz	38.1	36.3

The figures speak for themselves, and serve to emphasise well-known facts which are repeated in the experience of every country. In the principal seats of modern industry the population has doubled within thirty-nine years—in places it has more than doubled. On the other hand, in districts where agriculture is the prevailing occupation, we get within the same period either a negligible increase or a complete standstill. And, again, the agricultural districts which comprise seaport towns of growing importance compare favourably with other districts in this respect.

III.

To gain further light on the conditions affecting the population of modern Germany, which are on the whole similar to those existing in England, we may take a survey of the dissimilar conditions of the United States of America and of France.

The United States possess the very most favourable conditions for a rapid growth of population. Such are the vast natural resources on which production depends, the huge accumulations of capital, the capacities of workmen and captains of industry, and, above all, the illimitable perspective of the future, which, thanks to the immense extent of territory, knows nothing of the narrow bounds of an old European country.

Nevertheless, we find here all the peculiar characteristics of the most recent European developments. The rise in the standard of living, and its extension to wider circles of the population, results in a decline of the birth-rate.¹ This goes hand in hand with the influences most peculiar to it, exercised by immigration, which contributes nearly two-thirds to the increase of population. (Between 1900 and 1910 the total increase was 17.2

¹ Cf. John B. Phillips, *The Declining Birth-rate*, University of Colorado Studies, Vol. vii., March, 1910, pp. 159-178.

millions, to which the natural increase contributed about six millions.) The immigration of Slavs, Lithuanians, Hungarians, Italians, Irish, &c., supplements the native American population; and takes for its portion the kinds of labour which a true American considers to be beneath him. This relation is not very different from the one known to the ancients as the distinction between free Hellenes and barbarians. We can trace a reciprocal influence between the character and quantity of this immigration and the rise of the standard of living of the American population, which finds expression in the birth-rate. The contrast which has thus been developed constitutes the racial problem of the Northern States of the Union, not altogether dissimilar to the contrast between black and white which is the problem of the South.

Between the state of affairs in France and the existing conditions in Germany, the contrast is much simpler, because much harsher. All Frenchmen would not, indeed, endorse the gloomy view of Bertillon which we have quoted above. There have not been lacking, up to the very last, critics who viewed the situation with a measure of self-complacency. Colson (Ingénieur-en-chef des Ponts et Chaussées) discusses the phenomenon in the first volume of his great work on Political Economy.¹ He ascribes it to the increase of prosperity, civilisation, and democratic habits, and he claims the authority of Leroy Beaulieu in support of his view. But Leroy Beaulieu has, in the past few years, expressed the deepest concern about the declining birth-rate in his native country, and has even recommended a recourse to State interference, which, in Colson's opinion, belongs to the rusty armoury of the *ancien régime* rather than to the orthodox principles of Leroy Beaulieu. "If France," writes Colson, "is the first great country in which the birth-rate has declined so much, this is only because France has been the first country where the equal division of landed property made general those tastes and habits of thought which had hitherto been peculiar to certain classes." "We are not," he concludes, "to be led astray by exaggeration: we are not to allow ourselves to be terrified by the bogey of depopulation, any more than the contemporaries of Malthus allowed themselves to be haunted by the spectre of over-population."

Bertillon's views are very different. His book is, from end to end, the warning cry of the prophet, announcing the extinction of France. Nor is it the first time that the prophet's note is heard. Bertillon's father had raised his voice in warning time

¹ Paris, 1901, Vol. i. pp. 275-280.

and again, and always in vain. The father's mantle has descended on the son. A message conceived in a like spirit was Emile Zola's *Fécondité* (1899), and Bertillon appeals to him as to a comrade in arms. Like Zola, Bertillon is not guiltless of a tendency to exaggeration. His attack on Malthus is calculated to arouse suspicion. The Malthusian doctrine may have led to deplorable consequences in France, but the blame does not rest with Malthus himself, who specially guarded against the conclusions which the neo-Malthusians have drawn from his doctrine.

France is to-day the scene of a tragic conflict, for the national vanity and the thriftiness of the modern citizen, two conspicuous national traits, clash irremediably on the population question. Nor can we see any issue out of the deadlock.

It seems unlikely that the expedient of State interference which has proved ineffective in the past should have more success in the future. The conversion of the orthodox political economists, of the old supporters of the doctrine of *laissez-faire*, to the new expedient, has not added to its prestige. Bertillon, too, subscribes to it, but he does more. He attempts to influence his countrymen by preaching and prophetic exhortation. His book is an indictment which proceeds by means of bold exaggerations. He sees nothing but darkness on the one side, and on the other nothing but light. In contrast with the small French family he views large families as an ideal without any flaw. Of Emile Zola he speaks with rapturous admiration. That a large family may constitute a heavy burden on the parents, both from the economic and from many other points of view, he never pauses to consider. Like the poet, he takes for his theme a few actual cases which, perhaps, were never really so beautiful as he represents them, and these he regards as typical of the whole of society. All children grow up into energetic men and women: the large numbers create about them an atmosphere of parental and fraternal love, of solidarity, of mutual helpfulness, which they breathe in from their earliest years. There is never a lean branch on the trunk, no discord, no such thing as a good-for-nothing son. An acquaintance with real life reveals a sufficient number of cases where everything is quite different from this ideal, and if we aim at a trustworthy, scientific conclusion on this great question, we must take a comprehensive view of all the facts involved.

The birth-rate of France has declined steadily for a century. In the decade 1801-10 it was 33 per 1,000 inhabitants; between 1901 and 1909 it was 20.7. Owing to a decline of the mortality

rate, there is still a small surplus of births over deaths (between 1901-09 it was 1.1), but even this only holds good when an average is taken over a number of years, for in 1907 there were actually 19,920 more deaths than births.

The contrast between the numbers of the population in France to-day and in former centuries, when we add a comparison with the progress of other nations during the same period, becomes sufficiently depressing :—

	1700.
France	20 millions
Great Britain	9 "
Austria	13 "
Prussia	2 "
	1789.
France	26 millions
Great Britain	12 "
Austria	18 "
Prussia	5 "

And to-day what a difference !

The universality of the French tongue is disappearing. It is spoken by barely fifty millions, while English is spoken by 150 millions, German by 120. And as the official language, English stands for 500 millions. Further, the number and the quality of the French army is declining; the wealth of the country also. The consumption of coal, the foreign trade, even the condition of the working classes is going down hill. The immigration of foreigners continues to increase at the expense of the native population. Italians on the Mediterranean, Spaniards in the Pyrenees, Belgians in the north, Germans in the east—they crowd the labour market, and compete even in trades that are recognised as specially Parisian. In spite of naturalisation they are only artificial Frenchmen, of dubious patriotism.

L'aisance entraîne la stérilité. But is that a necessity?

In the neighbourhood of Dunkirk there is a community of the name of Fort-Mardyck, founded by Louis XIV. for the families of seamen in the navy. Each family obtains twenty-four acres of land for cultivation, and a place on the shore for fishing. The use of the land passes on to the children; it is indivisible and cannot be mortgaged. The people are comfortably off, and free from the cares that arise from inheritance. Hence a birth-rate of 43 per 1,000, second in Europe only to that of Russia. But, very differently from the experience of Russia, out of every forty-three children (exclusive of the still-born) twenty-three attain their twentieth year. The population numbered 204 in 1729; in 1906 it was 1,785.

A similar instance occurs in the department of Finisterre. But it is above all in Canada, in the Province of Quebec, inhabited by an almost entirely French population, that the advantage of freedom of bequest and the physiological capacities of the French race are most clearly revealed. The birth-rate here is 48 per 1,000 inhabitants.

On the other hand, Bertillon recently compiled statistics relating to 445 distinguished persons (artists, writers, politicians, successful business men, soldiers, and civil servants), and found that the total of their children numbered only 575 (*Figaro*, August 17th, 1909). Other statisticians have compared measures of thrift with the birth-rate, and have found that the two stand in inverse relation to each other. This conclusion is proved by a comparison between different districts of France, and of different countries with each other. Where there are many savings bank books there are not many children.

While the French are occupied in seeking remedies for this state of their population, it is not our business to offer them the help of our advice. We should not even draw profit ourselves from these counsels, for I believe that those who see a similar fate arising on the horizon of the German or the English nations are entirely mistaken. It would not, however, be easy to adduce proofs for this belief.

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WAGES AND THE MOBILITY OF LABOUR.¹

A GREAT deal of criticism has been directed by trade unionists against Labour Exchanges on the alleged ground that they supply workmen at less than the rates which trade unions try to maintain. It is opportune, therefore, to discuss what effect the greater mobility of labour, which it is the primary function of the exchanges to promote, is likely to have on wages. It is not proposed to defend, examine, or criticise the actual policy of the existing exchanges.

Before proceeding to the general question, it will be useful to examine a simplified abstract case.

PRODUCTION OF WHEAT.

		Before Movement		After Movement	
		District A	District B	District A	District B
Two quarters, best land	Cost of production (other than wages)	s. 0	s. 0	s. 0	s. 0
	Rent	40	20	30	30
	Wages: 2 men	20	40	30	30
Two quarters, medium land	Cost	20	20	20	20
	Rent	20	0	10	10
	Wages: 2 men	20	40	30	30
One quarter, bad land	Cost	15		15	15
	Rent	5	No	0	0
	Wages: 1 man	10	production	15	15
One quarter, worst land	Cost	20		No	No
	Rent	0	production	production	production
	Wages: 1 man	10			
		A	B	A	B
Ten quarters at 30s. each	Cost	55	20 = 75	35	35 = 70
	Rent	65	+ 20 = 85	40	+ 40 = 80
	Wages: 10 men	60	+ 80 = 140	75	+ 75 = 150
			300		300
		Average wage 14s.		Average wage 15s.	

¹ The gist of this article was read at the Portsmouth meeting of the British Association.

Suppose that there are two wheat-growing districts, A and B, similar in all physical qualities, but that the week's wage of an agricultural labourer is 10s. in A and 20s. in B, their skill and efficiency being equal, and first, that there is a complete barrier to movement. Suppose that the work of one agricultural labourer for one week is necessary for the production of one quarter of wheat on any part of the land, but that in both districts additional outlay is necessary for manure or non-agricultural work; so that $2n$ quarters can be produced in either district with no such outlay ("Best land"); $2n$ with an outlay of 10s. per quarter ("Medium land"); n with an outlay of 15s. a quarter ("Bad land"), and n with an outlay of 20s. a quarter ("Worst land"). [The multiplier n is omitted throughout the table.] Let the selling price per quarter be 30s., before and after the movement of labour.

Then in district A the "Worst land" will be "no-rent" land, and in district B the "Medium land" will be "no-rent" land. [A constant can be added to the rent throughout without affecting the argument.] The rents, wages, and costs will then be as in the table.

Now let the barrier to the movement of labour be completely removed, so that labour is perfectly fluid, and let the $10n$ men concerned all obtain employment. $10n$ quarters will still be produced, $5n$ in each district. The "Bad land" of B will take the place of the "Worst land" of A, the labourers can in pure competition bring the rent to approximately zero [or the constant, suggested above, if there are alternative uses for the land]. The week's wage will thus be established at 15s., and the rest of the table "after movement" can be filled in.

As a result, it is seen that in the two districts combined the aggregate wages have increased from 140s. to 150s., and that half this increase has been obtained by the reduction of aggregate rent, half from the lessened cost of production. Rent has fallen in A and risen in B; wages have risen in A and fallen in B.

Mathematical analysis (see p. 51) shows that, under ordinary assumptions, the fall in cost, the rise in aggregate wages, the fall of rent in A and rise in B, the rise of wage in A and fall in B, take place whatever the numbers adopted and without the wooden division into four distinct kinds of land, if the assumptions are made that A and B are exactly similar districts and the movement is complete. In other circumstances, aggregate wages in the two districts together may fall or rise according to the shape of the supply-curves and the numbers adopted. But there is nothing

in any case to decide whether aggregate rent in the two districts together will rise or fall. This illustration applies in general to the case of diminishing return.

Though the case discussed at length is highly abstract, it serves to show the tendencies where the law of diminishing return is in operation. The competition of English with Canadian or American wheatfields has illustrated these processes. As America has been opened up the worst wheat land in England has been thrown out of wheat cultivation, and more and more remote land in the West has been developed. Rent (or the capital value of land) has risen in Canada and fallen in England. Wages in England have risen. But since the price of wheat has not been stationary the illustration of the theory is not complete.

Now let us consider a more general case. Suppose that between two districts A and B there is a perfectly free flow of commodities, and a fairly free flow of capital and of enterprise, but none of wage-earning labour. In both districts under normal conditions the population will be employed at a wage which will be relatively high in industries in which there is an unsatisfied demand for labour, and low where labour is superabundant; but there may be workmen who prefer complete absence of employment to work at the wages that can be paid for the work that they can do, including those who are specialised for kinds of work which are superseded in their district. In both districts also there may be land and fixed capital and ability of management unused, or not used to the best advantage, because there cannot be obtained labour in sufficient quantity or with the necessary special skill to allow remunerative production. Within the district A or the district B real net efficiency wages will be equal, but the levels in A and B will not necessarily be equal. Let the level in B be the higher. Now let those obstructions to movement of workmen, which are due to ignorance or restrictive laws, be removed. The flow, if any, will take place gradually, since other difficulties of movement will remain.

Where want of skilled labour prevented the best use of land and capital in B, this want can in some cases be supplied by importing from A labour that could not there find employment worthy of its special skill. Such a case would be found, if a mine was discovered in B, while a mine in A had been worked out; and, in fact, miners commonly follow their work all over the world. In this case there is gain to all concerned, including the consumer. At the same time other specialised labour may move from B to A.

Again, where labour was unemployed or employed at a starvation wage in A, it will tend to move to B where the wage is higher. This is the case of the numerical illustration given above, but we need no longer postulate diminishing return. The wage obtained by migrating workmen will be higher in B than it was in A. Whether the wages of those already in B fall or not depends on the nature of the demand. There will be a tendency to fall at first, but the more rapid development of the district B may soon result in a higher level of wages all round. The most inefficient labour in B may, however, be displaced. Rent will fall in A and rise in B. The movement will continue till the real net efficiency wages in A and B differ only by a sum necessary to meet the cost of travelling, for there will be some men without any local or family ties who will move simply for wages.

This case merges into the more general class, where persons already employed at a trade in A are attracted to try to find work in the same trade in B. In general, there will be no place immediately open for them, since demand and supply are equal in B at the higher wage. If there has been, and continues to be, free competition in B, the rate of wages may fall nearly to the A level; at this lower rate more will presently be employed, till a new equilibrium is established at a rate between those formerly current in A and in B. At the same time, wages in A will rise. The new level of wages, now nearly the same in B as in A, may be higher or lower than the former average in B and A together, according to circumstances.

If in this case the workmen in B, before any movement of labour, had united and succeeded in establishing a monopoly price for their work, the importation from A will, of course, tend to break the monopoly. But in the more common case when a trade-union or standard rate had been established in B, higher than would have been obtained by pure competition, but not higher than is necessary for attracting workmen and supporting them in fit condition for effective work, it will in many cases be possible to absorb new workmen gradually at the same rate. This will happen if the industry can work economically on a larger scale (increasing return), and in the end wages will be higher than the former B level, since marginal productivity is increased. Again, the rate may actually remain unchanged after the influx, when without the influx it would have risen.

A monopoly wage may also be lowered, when a new source of labour becomes available, by substituting a different process

for producing a given result, so that the former labour is no longer in demand in the district. Thus, if agricultural labour was scarce in a country, and men working steam-ploughs and other machinery had established a monopoly wage, it would be possible when foreign labour became available to dispense with the machinery, and this would be done if it would reduce the cost of production.

Summing up the argument,—increased mobility of labour always tends to produce lower prices to the consumer, or higher average wages, or higher profits, and may produce all three. Rent tends to fall in the district which workmen leave and to rise in that they reach; there is nothing to show in general whether the aggregate will rise or fall. Wages rise in the district left; wages fall in the district reached in the case of diminishing return, and ultimately rise in the case of increasing return. In the former case the average wage of all concerned may, but is unlikely to, fall; in the latter case it ultimately rises. Thus, in cases of increasing return, wages rise ultimately to a higher level than in the better-paid district, profits rise momentarily, and the cost of production and prices fall. In cases of constant or diminishing return, the rate of wages falls in the district of immigration.

In the long run and in general the fall in the cost of production, which is the general consequence of increased mobility, is an advantage to the community as a whole, and after some complicated reactions may easily restore the real wage-level which was locally and temporarily lowered.

By the economist, who regards the consumer and producer and the inhabitants of both districts affected impartially, increased mobility will always be commended, if the effects are so gradual as not to diminish the value of fixed capital, material, or personal, by more than is gained by the movement. The local patriot, however, who is interested only in a particular district, will not always view with equanimity the lowered rental, higher wages, and smaller population in the district from which labour flows. The trade unionist, also, cannot ignore the real danger of a fall of wages in the district which receives the labour.

Labour exchanges must then find it impossible to please all parties, and are likely to excite suspicion even when the ultimate result will be pure gain. I will not discuss whether they should facilitate emigration to other parts of the Empire or to foreign countries on the part of men already at work. Internal migration should always be encouraged from the national point of view, with the limitation just given as to fixed capital or skill. If the

rule is adopted, in deference to trade union opinion, that labour should only be supplied at, at least, the standard rate prevalent in the district to which it goes, the advantages would still accrue, but more gradually; for movement would take place wherever a trade is expanding or when the rate of wages was unstable and on the point of rising; it would also take place in the numerous cases where work was not done in a district simply because no one could be obtained who could do it.

Finally, it has been shown incidentally that the common statement that exchanges cannot increase employment, is not true. Wherever there is a possibility of "increasing return," which cannot be met by local labour, exchanges have the opportunity of finding work for the unemployed.

• *Mathematical Analysis.*

Let $f_1(x)$ be the cost function, apart from agricultural wages, for the production of wheat in district A, and let $\frac{d}{dx} \phi_1(x) = f_1(x)$; so that the total cost of producing x_1 units, apart from agricultural wages, is $\int_0^{x_1} f_1(x) dx = \phi_1(x_1) - \phi_1(0)$.

Suppose that the wheat sells at an unchanged price p per unit, that no rent is paid for the ground that produces the most expensive unit, and that the agricultural labour per unit is the same throughout. Then the wage for the last increment δx is $(p - y_1)\delta x$ where $y_1 = f_1(x_1)$. The rent in district A is $y_1 x_1 - \phi_1(x_1) + \phi_1(0)$.

Let f_2, ϕ_2, x_2 stand for similar functions, &c., in district B. Assume diminishing return, i.e., that $f'(x)$ is positive.

Now let labour be transferred from A to B, so that $x_1 - h$ units are produced in A, and $x_2 + h$ in B. Of course $p - y_2 > p - y_1$, and $y_1 > y_2$.

I. Suppose h small.

The fall in the actual cost of production is

$\phi_1(x_1) - \phi_1(x_1 - h) + \phi_2(x_2) - \phi_2(x_2 + h) = h(y_1 - y_2)$, if h is small and h^2 neglected, [expanding by Taylor's theorem]. This is positive.

The fall in the aggregate rent of A and B together is

$$\begin{aligned} & y_1 x_1 - \phi_1(x_1) - f_1(x_1 - h) \cdot (x_1 - h) + \phi_1(x_1 - h) \\ & + y_2 x_2 - \phi_2(x_2) - f_2(x_2 + h) \cdot (x_2 + h) + \phi_2(x_2 + h) \\ & = h(x_1 f'_1(x_1) - x_2 f'_2(x_2)), \text{ if } h^2 \text{ is neglected.} \end{aligned}$$

In general this may be positive or negative.

If f_2 and f_1 are the same, x_1 is greater than x_2 . Let $x_1 = x_2 + k$, where k is not negligible. The expression becomes $hk\{f'_1(x_1) +$

$x_2 f''_1(x_1 - \theta h)$, where θ is a proper fraction. This is positive if $f''(x_1)$ is positive (the cost curve convex) and in some other cases.

The wage per unit in A increases by $h f'_1(x_1)$; that in B decreases by $h f'_2(x_2)$.

The increment in aggregate wage is $h\{y_1 - y_2 + x_1 f'_1(x_1) - x_2 f'_2(x_2)\}$. In general this may be positive or negative.

If $x_1 = x_2 + k$ and $f_2 = f_1$, the increment is $h k\{2f'_1(x_1) + (x_2 - \frac{k}{2})f''_1(x_1 - \theta h)\}$. In cases which seem likely to be exceptional, this would be negative.

II. Let h be finite, and let the transference of labour continue till $f_1(x_1 - h) = f_2(x_2 + h) = \bar{y}$.

Then $y_1 - h f'_1(x_1) + \frac{h^2}{2} f''_1(x_1 - \theta_1 h) = \bar{y} = y_2 + h f'_2(x_2) + \frac{h^2}{2} f''_2(x_2 + \theta_2 h)$, where θ_1 and θ_2 are proper fractions.

The fall in the aggregate cost of production becomes

$$\frac{h^2}{2} \{f'_1(x_1) + f'_2(x_2)\} + \frac{h^3}{3} \{f''_2(x_2 + \theta_2 h) - f''_1(x_1 - \theta_1 h)\}.$$

This is always positive if f'' and f''' are positive. It is also positive if h is moderately small, or if $f''_2(x_2)$ and $f''_1(x_1)$ are nearly equal, or if f'' is small relatively to f' . In general we may say that the expression is positive.

The decrement in aggregate rent becomes

$$x_1(y_1 - \bar{y}) - x_2(\bar{y} - y_2) - \frac{h^2}{2} \{f'_1(x_1) + f'_2(x_2)\} + \frac{h^3}{3} \{f''_1(x_1 - \theta_1 h) - f''_2(x_2 + \theta_2 h)\}.$$

There is no ready means of determining the sign of this expression in general. It may be positive or negative.

The increase in average wage in A is $y_1 - \bar{y} = h f'_1(x_1) - \frac{h^2}{2} f''_1(x_1 - \theta_1 h) = h f''(x'_1) + \frac{h^2}{2} f''_1(x'_1 + \theta' h)$, where θ' is a proper fraction, and where $x'_1 = x_1 - h$.

This is positive unless the cost curve is rapidly concave.

Similarly there is a decrease in the average wage in B.

The increment of aggregate wages in A and B together is $x_1(y_1 - \bar{y}) - x_2(\bar{y} - y_2)$.

This may be negative.

III. Now, as in the text let f_1 and f_2 be the same function, and let $x_1 - h = x_2 + h = \bar{x}$, and $f(\bar{x}) = \bar{y}$.

The reduction in aggregate cost is

$h^2 f''(\bar{x}) + \frac{h^3}{3} \{f''(\bar{x} + \theta_3 h) - f''(\bar{x} - \theta_4 h)\}$, where θ_3 and θ_4 are proper fractions. In general this is positive.

The decrement in aggregate rent is

$$h^2 f''(\bar{x}) + f''(\bar{x} + \theta_3 h) \cdot h^2 \left(\frac{\bar{x}}{2} + \frac{h}{3}\right) + f''(\bar{x} - \theta_4 h) \cdot h^2 \left(\frac{\bar{x}}{2} - \frac{h}{3}\right).$$

The increment in aggregate wages is

$$2 h^2 f''(\bar{x}) + \frac{h^2}{2} \{f''(\bar{x} + \theta_3 h) \cdot (\bar{x} + h) + f''(\bar{x} - \theta_4 h) \cdot (\bar{x} - h)\}.$$

This is always positive if $f''(\bar{x})$ is positive.

A. L. BOWLEY

HISTORICAL NOTES ON THE LOT-MEADOW CUSTOMS AT YARNTON, OXON.

I AM permitted by the kindness of the editor to return to the subject of the lot-meadow customs at Yarnton, Oxon., of which I gave some account in THE ECONOMIC JOURNAL for March, 1910.¹ Briefly to recapitulate the facts, there are three meadows by the Thames in which lots are cast annually to put the holders of mowing rights in possession of particular strips of grass. The rights are held in some cases in virtue of the tenancy or ownership of a farm, in other cases are acquired by purchase at auction from the principal landlord or other owners who do not want to mow. In the former cases, the right is held permanently; in the latter, only for one year; but in both cases the right is merely an abstract right to mow so many acres of grass-land; until the lots are cast the rights carry no particular piece of ground with them, either for the permanent or the temporary owners. Lots are cast with thirteen balls, distinguished by the following names: White, Green, Harry, Perry, Dunn, Boulton, Boat, Rothe, Gilbert, Freeman, William of Bladon, Water Geoffrey, Water Molley. Each meadow is divided into a number of sets or "shots" of thirteen strips. A full mowing right (generally spoken of in the village as "a full ball") means a right to a whole strip every time the ball owned comes up in the drawing; that is, one whole strip in each shot. There are, however, half-rights and quarter-rights, giving the half or the quarter of a strip in each shot. Each ball carries with it also the right to commons of pasture after the hay is off, on the basis of one cow or bullock to every acre or one horse to every two acres.

¹ I regret that I did not, in the publication of the earlier article, mention the remarks on these lot-meadow customs in the *Transactions of the Historical Society of Oxford*, vol. xxiv, 1898. Those remarks did not go into the customs at sufficient length to make the processes of lot-drawing clear, nor did they deal with the history of the custom. My articles have been based on my own personal inquiries and investigations.

Of the three meadows two form, in effect, one large meadow, the line of division being imaginary. They are called Oxy and West Mead. Oxy contains seventy acres and is drawn three times, the strips running off at right angles from "headlands," as was the case with arable open fields. West Mead contains eighty acres, and is drawn five times. The third meadow, Pixey, is an island formed by the taking of a backwater from the Thames at King's Weir to work mills at Wolvercote. It contains, unlike the other two, some land not "drawn" at all; about sixty acres are drawn, and they are divided into two shots of thirteen strips each. But the lot is only cast once, as the headland runs straight down between the strips, and each ball is made to do duty for a lot on either side the headland, that is, for two lots at once. For various reasons I have come to the conclusion that Pixey may, for purposes of historical investigation, be left out of account, and that we are not likely to lose any consideration important for our object if we go to work solely on Oxy and West Mead.

Nowadays practically none but Yarnton men use the rights in Oxy and West Mead, but in old days the neighbouring little village of Begbroke shared in them, and the survival of its rights to-day is that the Rector of Begbroke has tithes in the meadows, and owns besides a ball, and another ball goes with one of the Begbroke farms. The right that a ball carries is slightly different in area in the two meadows. In Oxy, where there are three drawings, the total measurement of a man's three strips is about five acres, each strip being thus about an acre and two-thirds. In West Mead, where there are five drawings, the total of the five strips is about six acres, each strip averaging thus one acre and a fifth. In point of fact, the strips, as may easily be understood, are not all of the same size. Meadows have odd shapes, and river-bounded meadows especially do not lend themselves to strict rectangular portioning. A man's ball may bring him a queer fragment which may be more or less than the average strip, and it is worth noting that these strips are called by the men "gusset acres," a variant of the usual phrase "gore acres," which was applied to the odd corner-pieces of arable, and is to be found in many ancient land documents. However, the strips have in each field a rough equality of size, and this size is about the extent of a good day's mowing. That this was in some sense the basis of measurement may be assumed from the fact that when the strips are sold they are to this day described as "men's mowths, or customary acres." But obviously the

basis of distribution needs much more explanation than that, and here one approaches the most difficult points in the investigation of the custom. What, for instance, fixed the number of the balls at thirteen? One may be quite sure that it was no accidental choice, for the value of the meadows would ensure an accurate and careful distribution of rights, so that the number must have represented in some definite way the number of claimants. Again, one may probably be sure that the number is ancient. If any readjustment of the number had taken place this side of the Middle Ages the history of customs would be far less obscure, and a tradition of change would almost certainly have persisted. Moreover, a disturbance of the number would be unlikely, because as conditions changed and lots gradually accumulated in comparatively few hands, any admission of change would open the door to so many claims that the old custom would be strictly preserved by its beneficiaries to keep out intruders. What one has to do then is to find some period at which the number thirteen bears a ratio, justifiable on ancient principles of land tenure, to the number of land-holders in the parishes to which the meadows belong. Such a ratio seems to be discoverable on the theory that the whole ball right is a later product of accumulation, and that the real unit was a quarter-ball right. The immediate support of this theory is that a quarter of a right is still called sometimes "a yard." Now in the welter of confusing and varying names of land measurements in Norman and feudal times, "yard" is well established as the description of the normal holding of a villein in arable. Its size varies, to the despair of modern investigators, from twelve up to forty acres, but the average "yard" of arable was thirty acres, that is, thirty separate acre-strips. Since the same word is found in connection with the meadow strips, it would appear to be safe to conclude that it implied here also the same thing, namely, the normal holding. In the meadows the extent of a full ball running through the two meadows being about eleven acres, the size of the yard would be about three acres. It may at first sight appear strange that one word should equally mean thirty acres or so when applied to arable, and only three when applied to meadow land. But it is not what we should call a strict term of surface measurement; none of the old names for portions of land are strictly arithmetical. Indeed, it is hardly right even to speak of the word as applied to two things; it is really applied only to one, a land-holder's holding, since that included arable, pasture, and meadow, where meadows existed.

Vinogradoff says : "The common pastures as well as the meadows were thought of merely as a portion of the holding. It is only inaccurately that we have been speaking of a virgate of thirty acres and of a ploughland of 180 or 160. The true expression would be to speak of a virgate of thirty acres of arable and the corresponding rights of pasture and other common rights." (*Villeinage in England*. Essay 2. Chap. 1.) Our yard in the meadows, therefore, is not a matter of distinct measurement, but is a yard because it is in the meadows the same thing as the thirty acre-strips are in the arable. Nor need there be any difficulty in accepting three acres of meadow as the fair accompaniment of thirty of arable. Maitland dwells more than once on the high value of meadows in comparison with arable land. For instance, he writes : "In the thirteenth century it is common to find that the acre of meadow is deemed to be twice or three times as valuable as the best arable acre of the same village, and a much higher ratio is sometimes found." (*Domesday Book and Beyond*, p. 443, footnote.)

The clue given by the survival of "yard" as the name of a quarter of a lot may therefore be pursued as reasonably sound. It is curiously supported by a remarkable feature of the customs as practised to-day. The man who buys a quarter of a lot takes his quarter in each strip lengthwise down the strip, and does not, as one would naturally expect, cut off one end. That is to say, the quarter is in itself regarded as a strip, and not a mere fraction to be taken in any convenient way. It may fairly be urged that such a way of dividing the strips would never have arisen except in days when a man's whole agricultural work was done in long strips. Reckoning then on the basis of quarter-lots as the unit of holding, it would follow that the number of holdings represented by the thirteen balls of Yarnton is really fifty-two. The next point is to justify that number by the ancient records of inhabitants. The rights in the Yarnton meadows were shared, as has been said, by Yarnton and Begbroke. Now in Domesday Yarnton is entered as having twenty villeins and Begbroke as having six. We have thus twenty-six landholders who would have claims in the meadows. The doubling of that number would give us the required fifty-two, and there is proper ground for doubling it. In some records of other meadows in this neighbourhood it appears that the lord took a full half of the grassland. These records exist in the Eynsham Cartularies (Oxford Historical Society's publications, Vol. 51, pp. 5 and 33). A piece of meadow at Shifford, called Twelveacres, was divided

annually into twelve portions, of which the lord took in one year the odd numbers, while the tenants took the even, and in the next year the lord took the even numbers and the tenants the odd (Cart. 2 fol. 2 v. 3 r.). In the case of a meadow at Eynsham the whole meadow was taken in even years by the tenants, and in odd years by the lord, lots being cast for strips in the tenants' years (id. fol. 23 v.). On the same analogy, if the villeins' rights in the Yarnton meadows numbered twenty-six, the lord would take an equal number; so that our fifty-two holdings are accounted for. The grouping of the fifty-two into thirteen also calls for some explanation other than that of the mere convenience of a smaller number of balls. Would not the explanation be that the economy of the village community was established on a reckoning, administrative and fiscal, by fours? Here the merely amateur investigator may well feel a qualm, seeing ahead in his path the problem of the carucate, the hide, and its relation to village economy and the virgate. But without going into the interminable questions of the area represented by those terms, it is clear enough that the virgate was the fourth part of the carucate or hide, that is to say, that for assessment purposes landholders were customarily reckoned by fours. It also seems to be agreed that this had its origin in a genuine necessity, namely, the need of association of some kind among villeins in order to provide teams for the ploughs. The full plough needed eight oxen, but Vinogradoff has shown that in the vast majority of cases ploughs of that costly heaviness would only be the demesne ploughs, the villeins using lighter ones capable of being drawn by four oxen, or more rarely by six, or even by three. In any case, villeins would have to combine, and whatever the later and more artificial and theoretical associations of the carucate, it would have its solid origin in a combination of four villeins for practical purposes. "The virgate or yard-land, being the fourth part of a hide, corresponds to one-fourth part of the plough, that is, to two oxen contributed by the holder to the full plough-team." (Vinogradoff, *Villeinage in England*, Essay 2, chapter 1.) The sum of all this is that the village system had inherent in it a habit of calculation by fours, and it is therefore quite reasonable that the lot casting in the meadows should go by fours, and the fifty-two holds be combined in thirteen balls. This would have the added advantage that it would give a more various and communal fall of the shares than would a single casting of fifty-two lots. •

So far we have arrived at fair presumptive grounds for dating

the numerical condition of the Yarnton meadow customs, as far back as Domesday. The names on the balls may perhaps be of the same date. Presumably names were used instead of numbers since names would more easily identify the lots in the mind of the villeins. The lord's name would not appear at all, since the effect of the arrangement which has been suggested as the basis of the lot-drawing would work out in practice as giving the lord a half of each lot. The names would therefore presumably be those of villagers, thirteen out of the twenty-six standing sponsors to the balls. The first complete record of the names of villagers is not, of course, Domesday, but the Hundred Rolls of Edward I., and we find these names distinctly capable of connection with those on the balls, if we bear in mind the corruptions that would undoubtedly occur in the re-writing of the names from time to time as the ink gradually grew faint under long handling. The character of the present writing is such that it might safely be put at a hundred or a hundred and fifty years ago. And long before that the old names would have disappeared from the village, so that earlier writers would often have had to make a mere guess at the names they were copying. In the Hundred Rolls for Begbroke appear the names of Richard de Bladene and Agnes de Bladene; and be it noted that the ball "William of Bladon" belongs now to the Rector of Begbroke. There was also a Richard de Pyrie in Begbroke, who may account for the ball "Perry." In Yarnton the following names occur: Will Dun (for the ball "Dunn"); Simon le Wyte (for the ball "White"); Alicia Bovetone, whose name may easily in the frequent rewritings have become "Boulton," especially if the "v" had the common "u" shape; and Agnes le Juvene, whose name may, by the same process, in the hands of an ignorant man trying to decipher worn-out writing, and ready to jump at a familiar word, have become "Green." One can also imagine the name of "Walter Godefray," a villein of Begbroke, becoming "Water Jeoffrey." There is a Richard de Cote, who may account for either "Boat," or more probably "Rothe." Another name may be tracked in a less direct way. In 1220 one "William, son of Gilbert of Erdington," the ancient name of Yarnton, held a good deal of land in Yarnton from the Abbey of Eynsham (Eynsham Cartularies). That gives us the existence of the name "Gilbert" in the parish, to account for its appearance on a ball. In the Hundred Rolls there were several free men in Yarnton, though none at Begbroke. Domesday does not single out the free men from the villeins, but if there were some in the time of

Edward I., there were probably some earlier; especially as two of them in the Rolls were not the quite small holders which free men so often were, but held two virgates apiece. The name "Freeman," thus may be added to our identifications. A more erratic flight may be tried with the oddest name of all, "Water Molley." In the Hundred Rolls a landholder in Yarnton appears as "John of the Mill," no doubt the mill on the hill in the village, which is still called Windmill Hill. If there was ever a Walter of the Mill, he would very likely have been written down by the clerkly person who inscribed the balls as "Walter Molendinarius," or rather, since the balls are small, as "Walter Molen," or some such abbreviation. Very little of the process of corruption of names would be required to arrive at the name as it is written at present. Although the Hundred Rolls have to be used for clues to the names, the names themselves may well be contemporary with Domesday. There was no such great change in villages between 1066 and 1277 that the current names would be much altered. Some fail of any clue in the Rolls, but it is, at any rate, interesting to see that eleven can be connected with names that are on record as existing in Yarnton and Begbroke in those early days.

The processes by which the balls arrived at their present allotment are impossible to trace, but not difficult to understand in a general way. The first difficulties would be caused by the considerable increase in the number of villeins in the two centuries following the Conquest. The Hundred Rolls give for the two villages no less than sixty-two villeins, instead of the twenty-six of Domesday, and in Yarnton seven free men besides. Even with all the adjustments that could be made by the mediæval processes of family succession, the pressure on the meadows, which did not admit, as the arable land did, of extension, must have been severe. Lots by sub-division would become very small; there is one existing claim which may perhaps represent to this day that particular stage of the meadow history. One farmer now has (besides other rights) the right to a quarter of a ball in *one drawing only* in West Mead. That gives him about a third of an acre of grass, and it is difficult to think that any such tiny claim would be of late origin; it is more likely to be a survival which has for some reason come unaltered through all the centuries when lots tended to accumulate in fewer and fewer hands. Again, many of the rights and portions of rights sold yearly are clearing surviving sub-divisions. The auction bill for 1909 shows, "Harry (first meadow); Half of Boulton (first

meadow); three-quarters of Gilbert (in West Meadow); one quarter of Water Molley (in Oxe),” and so on. . Probably all such partial rights go back to the early days of village expansion.

However this be, it is certain that the increasing numbers in the villages must have made many of the lots under the Domesday arrangement so small as to be tiresome in working. As a measure of relief, it would seem that the lord withdrew from the lot-casting altogether, enclosing instead a portion of the meadows. This would somewhat diminish the available land, but as the whole fifty-two units would then be distributable among the villeins, a man's share would come out in strips of a more sensible size. We do, in fact, find that by this time some meadow land was in demesne. The amount is not given in the Rolls, but may perhaps be guessed at. As one stands at the gate of the meadow to-day, instead of seeing a clear expanse one finds the view to the right cut off by a hedge which marches straight out into the meadow for about two hundred yards, turning off then at a right angle, and running along the north side of West Mead, from which, again, it turns back after some three hundred yards. In effect, a large, roughly rectangular enclosure is projected into the meadow. This enclosure adjoins ground which was formerly the fishponds of the manor, so that it looks very much like the meadow-land taken into demesne. In area it is 56½ acres. Now the meadow-land of Yarnton is put down in Domesday at 180 acres, and the meadow-land of Begbroke at fifty acres, a total of 230 acres. The common calculation of the area of the Yarnton meadows to-day is 170 acres, which would just allow for the quantity taken into demesne.

The consideration of the pressure of growing population on the area of the meadows suggests also a possible explanation of the association of Pixey with the Yarnton meadows. There were in both villages at the time of the Hundred Rolls a certain number of villeins holding under religious houses, at Yarnton under the Abbess of Godstow, and at Begbroke under the Prioress of Studley. Both these houses were favoured, and Studley appears to have been founded by Bernard de St. Wallery. St. Wallery was the honour in which the manor of Yarnton was comprised. Now in 18th and 19th Henry II., Bernard gave to the nuns of Godstow the meadow of Pixey. Did the villeins holding under the Abbess and the Prioress take their meadow rights in Pixey from that time? We should thus have a sound reason for the use of the Yarnton lot-balls in Pixey, although the holdings in Pixey show now no traceable connection with those in the

Yarnton meadows. The use might quite naturally have arisen if villeins from both villages had rights in Pixey. This might account, too, for the curious size of the Pixey lots. The strips there are over two acres in size. That would be more than a man's mowth, even in such easy mowing grass as these meadows bear. If the religious houses availed themselves of the existing lots to save trouble, they would have to apply the number quite arbitrarily, and divide Pixey, not on any basis of a man's day's work, but simply into thirteens. If the tenants under religious houses held their meadow rights in Pixey, six claimants would be removed from the Yarnton meadows. Seven of the Yarnton villeins only held a half-virgate each, and would therefore have only a half-yard in the meadows. The number of units is thus reduced from the full sixty-two to fifty-two and a half, which would square with the number of lots when the lord had withdrawn entirely from the lot-drawing.

But we already approach the time when all such communal reckonings become uncertain. The Black Death and other events which all over England shattered the villein class, must have started in Yarnton the tendency to accumulation of lots in a lesser number of hands. Of such small documentary evidences as exist a fairly early one is a lease of 1633, by which Henry Phipps, of Yarnton, disposed of several "holts" in the meadows; and Mr. Phipps Weston, of Yarnton, in 1789 includes in a valuation of his farm half an acre in Oxey and three-quarters of a lot in West Mead. A period at which one ought to be able to trace at any rate the final stage to present circumstances is rendered barren by the fact that I have been able to find no Enclosure Act for Yarnton. If one had been available, no doubt we should have record of the basis on which the balls came into their present ownership. As it is, no more can be done than to record the facts. Five balls, Rothe, Boat, White, Green, Freeman, belong wholly to five farms, and run through the two meadows, Oxey and West Mead, giving eight strips to each farm. Five others, Water Jeffrey, William of Bladon, Perry, Harry, and Dunn, are whole balls running through both meadows, but do not belong to farms. William belongs to the Rector of Begbroke, and the other four to the principal landowner of the village. The remaining three balls are still in the condition of being shared. Water Molley is divided into a quarter and a three-quarter share, the three-quarter share belonging to a farm. Gilbert is divided in the same proportions, and Boulton is divided into two half shares, of which one belongs to a farm. The balls

and portions of balls which do not belong to farms are commonly put up to auction, though of course there is nothing to prevent a farm putting up its ball to auction in any year, the purchaser at such sales being no more than the purchaser of one year's rights to mow. It might be worth noticing that the existence of some balls in portions is an additional argument, if any were needed beyond the fact that the quarter of a lot is called a "yard," for supposing that a quarter was originally the limit of holding. Such a fractional system would never have been a late introduction, applied, moreover, only to certain balls. It is infinitely more probable that the process of the centuries would have been a slow combination of quarter-holdings, not in the end absorbing all the fragments.

R. H. GRETTON

REVIEWS

Principles of Economics. By F. W. TAUSSIG. 2 vols. (New York: The Macmillan Co. 1911. Pp. xxxv. + 547 + xviii. + 573.)

THIS treatise is fully worthy of its author's high reputation. On the realistic side it makes princely contributions to economic literature, and taken as a whole it is well-proportioned, consistent, lucid, and comprehensive. In what follows, nevertheless, the critical note will be struck repeatedly, because in a serious detailed review of a book, the bulk of which is bound to meet with cordial assent, it is inevitable that most emphasis should be laid on trifling blemishes. As regards the points of theory which will be referred to, however, the reader must be reminded that these volumes are not intended to supplement or expound advanced theory, but "to state the principles of economics in such form that they shall be comprehensible to an educated and intelligent person who has not before made any systematic study of the subject."

Professor Taussig goes with the moderns in attributing the laws of demand to what is commonly called "utility"; but all his statements about utility will not carry conviction. On page 125 we read that "utility means satisfactions or enjoyments," and in dealing with consumer's surplus on p. 131 the author definitely commits himself to psychological utilitarianism when, following a distinction of Professor Patten's, he proposes to reckon the surplus from that stage of consumption at which "a pleasure economy" takes the place of a "pain economy." Unfortunately, in thus ranging himself with the psychological utilitarians, Professor Taussig places his economics in compromising company, according to the standards of the vast majority of psychological scholars, who reject *in toto* psychological utilitarianism. Moreover, however utility be defined, for advanced theory one, or the other, or both of the definitions of marginal utility would have to be objected to. Marginal utility is defined in one place, as the utility "yielded by the last of them (oranges) if they were

enjoyed in succession," and in another place as "the satisfaction got from any one unit of a stock." But, as Professor Taussig is not pretending to expound exact abstract theory, these points need not be pressed; nor need we press other points connected with them, the incomplete limitation of the law of diminishing utility, for instance, and the unfinished exposition of the doctrine of consumer's surplus and its uses.

Analysis figures next in the discussion of market value, the properties of which are scrupulously weighed with an evidently profound knowledge of the procedure on markets and of what actually happens there. Only one slight flaw was detected by the reviewer: the omission to prove formally that the mistakes made by the outside public are not distributed casually. If they were, they would be without effect on price movements one way or the other. The account of business organisation makes up another strong part of the book. But increasing and decreasing returns are treated only broadly. It is noticeable that Professor Taussig lends the weight of his authority seemingly—though there are some doubtful sentences—to interpreting external economies as economies geographically external to a firm, and not as economies only external to a firm in the sense that they are common to the whole industry and so not dependent on any one employer's prowess as a business man. In conclusion, as regards all parts of production, it may be foretold that most readers will absorb them with the feeling that they are learning under the direction of a master whose judgments have been moulded by unremitting and thoughtful scrutiny of the business panorama.

In the part on the interaction of demand and supply the author has tripped occasionally; and on the whole theorists would have welcomed fuller recognition of the distinctions upon which they have laid emphasis. On p. 181 a supply curve, proper and a successive costs curve are apparently treated as the same thing—probably for brevity of exposition; and on pages 195–6 the intersection of the demand curve by the supply curve from above is treated as if it marked an ordinary position of equilibrium instead of an unstable position—a slip, no doubt. As regards monopoly, the explanation of value never departs from the common-sense plane where rough solutions are deemed sufficient. The discussion of "dumping," that is, as it is put, "the disposal of commodities in a foreign country at one price and to domestic purchasers at another and higher price," is not wholly satisfying. Incidentally it may be questioned whether this definition corresponds with

current notions. Does not the ordinary use of the term imply that the lower price is "beneath cost of production," whatever that may mean? However, we need not dispute about definitions. Coming to theory, we read (p. 211 of Vol. 1) that the gain from home sales "may outweigh the loss on the dumped sales to foreigners"—a statement which seems to imply that Professor Taussig will agree with the remark made above about his definition—but we are not informed whether things are ever deliberately produced to be sold at a "loss," and if so why dumpers should elect to incur losses to dispose of their profits. What ought to have been pointed out is that though these foreign sales, when they are not sales of surpluses, involve loss, in the sense that they realise a price which is beneath the cost of production that would settle price under competition, they are profitable in so far as the price is not less than marginal collective costs—to use Professor Pigou's convenient term—that is, the addition made to the *aggregate* costs in the monopoly by the production of the last increment. But again it must be admitted that nowhere have the natural history and physiology of industrial combinations been laid bare with more judgment and insight than in the work before us.

As in most American works on Political Economy, in consequence of America's unhappy fortune in the management of its media of exchange, the sections devoted to money, banking, and allied questions are voluminous. If Americans profited from all that Professor Taussig has to say in these sections, their business course in the future would be less broken with eruptions. But one suggestion may be made: that, in view of its technical meaning, it is not advisable to use "elasticity" as it is used in the statement that "there is no such thing as elasticity in the demand for money." Professor Taussig means that the demand for money has an elasticity which is "unity," as Dr. Marshall has put it. On the phenomena of crises valuable observations are recorded. The semi-periodicity of trade fluctuations is recognised; but, if an external periodic cause in climatic variations is wholly rejected, are the difficulties which remain fully met? Miscalculation and maladjustment are to be expected, but why should they reveal periodicity in their recurrences? In this matter Professor Taussig appears to be at sea with the rest of economists, and many specific investigations will have to be undertaken before the port is made.

On business profits, Prof. Taussig holds the right view (in the opinion of the writer) that if *entrepreneurs* were more plentiful

"all goods and services would be more plentiful," while the share going to "business men would be less," but his treatment here would have been improved on the academic side had he shown by direct analysis why it would be less. On the theory of wages no criticisms seem called for. All economists will welcome these further pronouncements by the author of that suggestive volume *Capital and Wages*. Of labour questions generally Professor Taussig's exposition is admirable, except, perhaps, that he will seem to some to read too much "Socialism" into the Australasian labour experiments. The fixing of wages by public authority does not necessarily involve eventually the settlement by public authority of the distribution of wealth according to some criterion of justice. The object of the public authority, whether attainable or not, might be to decree the wage which competition would yield but to supplant the direct action of competition with the intention of abolishing strikes and lock-outs.

With regard to the principles of taxation, Professor Taussig inclines to the conservative view. But it is to ignore a large body of moderate people to say that "the courageous advocates of progression base their views precisely on the ground that the existing social order is not perfect, and that taxation should be one of the instruments for amending it," and again, that "any conclusion . . . in favour of progressive taxation . . . must rest, to be consistent, on a frank admission of unwelcome features in existing society and on a programme of social reform." Taxation proportional to income is, in Professor Taussig's opinion, in conformity with the principles of the economic system, but he cannot be held to have established his contention. In the matter of the incidence of taxes, views are put forward which are broadly identical with those generally accepted.

The length of this review must be taken as witness to the writer's sense of the great value of Professor Taussig's new work. In the main this notice is confined to detailed criticism because to have attempted to particularise the innumerable strong points of the book, which admit only of unqualified admiration, would have entailed a claim for at least the whole of the reviewing space in a number of this journal.

S. J. CHAPMAN

Laws of Wages: An Essay in Statistical Economics. By Henry Ludwell Moore. Professor of Political Economy in Columbia University. (New York: The Macmillan Co. 1911. Pp. 196.)

STATISTICS of the ordinary official kind have often served to support the arguments of political economists. But this is the

first time, we believe, that the higher statistics, which are founded on the Calculus of Probabilities, have been used on a large scale as a buttress of economic theory. For example, the method of *correlation* is applied by Professor Moore to test the elements of truth contained in the variant theories of wages; that they depend upon the cost of subsistence, upon the standard of life, or upon the labourer's productivity. For the means of subsistence he puts a certain typical set of commodities, in quantities obtained from workmen's budgets by the French *Office du Travail*. Comparing the cost of subsistence thus defined with the wages of unskilled labourers in the different *départements* of France, our author finds for the correlation between these two variables the not very high, yet not insignificant, coefficient, '306. Again, for the standard of life we have the *prix ordinaire de pension payé par l'ouvrier isolé*, as given by the French Office for the different *départements*. Between the standard of life thus defined and the money wages in the different localities there is found to be a fairly high correlation, namely, '667. This result might be unduly affected by the possible circumstance that local changes in the value of money differently affect the rate of wages and the price of *pension*. To eliminate this possibility of error, the conscientious operator applies the refined method formulated by Mr. Yule for the ascertainment of "partial" or "net" correlation. The result is not materially affected by this correction; the more exact measure of association thus obtained being, '628. To test the connection between wages and the productivity of labour, Professor Moore considers first an industry in which labour plays a relatively large rôle, namely, coal-mining. The statistics compiled by M. François Simiand exhibit the rate of wages and the value of the product for a period of fifty-six years. But in comparing the fluctuations of these two variables there occurs the difficulty that both of them show a constant trend in an upward direction. This difficulty is eliminated by the ingenious device of representing the general upward trend of mean daily wages, and that of mean value of daily product per labourer, each by a geometrical progression. Then for each year the actual figure is subtracted from the figure assigned by the general trend thus calculated. The two sets of deviations thus presented show a strong correlation, namely, '843. A similar device is employed to prove, from M. Simiand's statistics, that the fluctuation in the labourer's relative share of the product of industry varies directly with the fluctuation in the relative amount of machine power with which he works; the

coefficient of correlation being .599. These numerical results appear to us to be of value as illustrating and confirming economic theory. They may have also a negative use in correcting exaggerations, in particular the absurdities of Marxian dogma. A value similar in kind, if less in degree, attaches to the less exact measurements of association which Professor Moore has exemplified. Here is a specimen of data too scanty to admit of the ordinary methods of correlation. Employing one of the most recent con-

	Establishments in which Strikes—		
	Succeeded.	Succeeded partly.	Failed.
Ordered by Labour Organisations	80,772	25,916	56,563
Not ordered by Labour Organisations.....	5,927	1,720	9,857

trivances which Professor Karl Pearson has added to the armoury of statistical science, Professor Moore finds that the "correlation ratio" proper to a case of this sort is +.218. To that extent the results of strikes, ordered by labour organisations, are shown to be more favourable than the results of strikes not so ordered. We have somewhat fuller statistics as to the strikes ordered by labour organisations divided (as before) into the three categories "succeeded," "succeeded partly" and "failed," and (as to each category) subdivided into eight classes defined by successive degrees of strength attributed to the respective labour organisations. To determine the association between the degree of union control and the success of strikes, the Pearsonian method of "contingency" is applicable. The "co-efficient of contingency" proves to be .3. Of course, correlation, and still less contingency, is not causation. "The two phenomena may be joint effects of a common cause," as Professor Moore reminds us. In the course of his splendid calculations, he from time to time pauses to point out the logical character of the methods, the cautions with which the conclusions are to be accepted.

From this general description of the work we must, except one part, the chapter which purports to verify the hypothesis that differences in wages correspond to differences in "efficiency" (or "general sagacity and energy"). In attempting to paraphrase our author's argument, let us substitute for the somewhat impalpable "efficiency" a more familiar and manageable attribute, *weight*. The attribute is assumed to be such that if the population with which we have to deal is grouped according to degrees of weight, the normal law of error—the well-known form resembling the contour of a *gendarme's* hat—will be perfectly realised. Let us suppose, too, at first, that the statistics of wages, with which we have to deal, also conform perfectly to the normal law. Then the

percentage of the population, each of which weighs so many pounds, say 160 lbs. (being 10 lbs. above 150 lbs., the mean weight, suppose, of the population), is equal to the percentage of the population which are paid at a certain rate of wages, namely, one which exceeds the mean rate of wages by a certain number of pence. The number of pence (in excess of the mean) will be ten, if the degree or difference, one penny, is such that the ratio of a penny to the "standard deviation" (or to the "probable error") for the group of wage-rates is equal to the ratio of a pound (avoirdupois) to the corresponding coefficient for the group of weights. There is thus "a consilience," in our author's phrase, between the grouping of the weights and that of the wages. Given the former, we can reconstruct the latter. The reconstruction may be effected in a more roundabout manner, as follows. Corresponding to each degree of weight, *e.g.*, 151 lbs., 152 lbs. &c., write down not the number of persons each of whom weighs just so much, but the aggregate weight of the persons who are each of that weight. The ratio of that aggregate to the aggregate weight of the population above the mean weight (150 lbs.) is equal to the ratio of the aggregate wages paid at a particular rate (that is, the rate multiplied by the number who earn it) to the aggregate of the wages paid at all the rates above the mean rate. From this equality and the corresponding equation for weights and wages below the respective means, we can reconstruct the percentages of population earning each rate of wages. So far we have supposed the statistics of wages to be grouped *normally*. But now let the given shape be somewhat abnormal—the *gendarme's* hat projecting unsymmetrically on one side. Then, according to one of the methods which have been proposed for representing a skew grouping by a modification of the normal law (*Journal of the Statistical Society*, 1898-9), we may divide the given group of wages into two parts on either side of the "greatest ordinate"—*i.e.*, the predominating (most frequently occurring) rate of wages. Assuming that each of these portions may be represented by the *half* of a normal group, we may determine the (different) standards of deviation pertaining respectively to the two portions. Or—less accurately, perhaps—we might take for the dividing line, not the greatest ordinate, but that which (erected at the *median*) divides the total area into two equal portions. Then, on the lines of the roundabout method above mentioned, the normal group of weights might be employed to reconstruct the grouping of the number of wage-earners at the different rates of wages. The latter method, as we interpret, is the analogy of Professor

Moore's procedure. If this interpretation is correct, it will be apparent that what he accomplishes is not to verify an important law of wages, but to suggest and illustrate a not particularly good method of representing statistics. The thinness of his conclusion is disguised by adventitious involutions. The general reader fails to recognise the familiar properties of the normal law, owing to certain peculiarities in our author's presentation of the subject; much as the candidates at a certain elementary mathematical examination who had come primed with propositions about "triangles" were staggered by a paper in which the questions related to "right lines joining any three points." Thus, whereas we have conceived equal differences of weight with varying percentages of the population corresponding to each degree of weight, the conception presented by Professor Moore is rather that of equal increments of population with varying degrees of difference in the attribute under measurement. The essence of the reasoning cannot, of course, be altered, but it may be disguised by this novelty of expression. One more touch completes the disguise. The unfamiliar presentation of the normal law is involved in additional obscurity by connecting it with a difficult problem suggested by Galton and solved by Pearson, namely, to assign the probable differences between the successive members of a normal group (ranged in their order of magnitude). By the aid of the Pearsonian formula, Professor Moore arranges a so-called "Standard population of one hundred," at intervals corresponding to the numerical order of the members. To us it appears that this calculation relating to a population numbering literally a hundred is not a happy device for the purpose of representing a group of statistics numbering thousands. We are unable to share the enthusiasm of our author when he exclaims, "one would think that this mathematical problem had been formulated and solved with a view to the application of the results to our problem of the differential hypothesis of wages." Rather, the introduction of the problem here appears to us superfluous, not to say misleading. Altogether we cannot acquit our author of the charge—often brought too justly against mathematical economists and statisticians—of having overlaid a simple matter with useless and cumbrous technicalities. The writer of the chapter in question is open to a still graver imputation. Not only has he employed a steam-engine to crack a nut; but the nut is blind. We fail to see that the theory of reward according to efficiency has been "subjected to an empirical test"; we do not "find a remarkable consilience of fact and theory"—

as announced by our author in the parallel paper which he contributed to the *Journal of the Statistical Society* for 1907. For let us replace our model *weights* by degrees of efficiency; to fix the ideas we might suppose the degrees to correspond to the marks given to candidates at an examination, if grouped according to the normal law. By applying the upper part of that normal curve to the upper part of any other normal, or not very abnormal grouping, for instance, that of human heights, we might verify the hypothesis that tallness depends upon ability. By similarly applying the lower half of the examination statistics, the new "empirical test" may be used to "establish a quantitative relation" between ability and low stature!

The mention of examination statistics recalls an incident which may serve to assist us in summing up judgment. In order to illustrate the divergence of the marks given by different examiners to the same work, there was once concocted a piece of Latin prose, excellent as a whole, but deliberately dashed with a puerile mistake—the use of an ablative with a preposition which governs only the accusative. As was expected, there proved to be a wide divergence in the degree of importance attached to this blemish by different judges. An experienced University Professor thought that such a mistake in such a piece of prose might be treated as a clerical error, and accordingly he gave full marks to the composition. A scholar fresh from the schools thought a paper containing such a "howler" hardly deserved half marks. We have been similarly puzzled by the general excellence and exceptional defect in the work before us. We trust that the contrast will be accounted for by some equally satisfactory explanation. Meanwhile, we hesitate to give full marks to the composition.

F. Y. EDGEWORTH

Outlines of Political Economy. By S. J. CHAPMAN, M.A. (London: Longmans. 1911. Pp. xvi+413. Price 3s. 6d. net.)

Economics, Descriptive and Theoretical. Part I., *Descriptive.* By MARGARET MCKILLOP, M.A. Part II., *Theoretical.* By MABEL ATKINSON, M.A. With an Introduction by E. J. Urwick, M.A. (London: Allman. 1911. Pp. xiii+184+216.)

OUR principal ground of quarrel with Professor Chapman's book is that it is not what it professes to be. In his preface, he

says "this book is designed for any who are beginning the study of Political Economy" (p. v.). We feel sure, however, that even students who have advanced some way in their study of the subject will find considerable difficulty in following many of the chapters, and we do not think it is at all the sort of book that it would be advisable to place in the hands of beginners. It is true that the author suggests that certain chapters might be omitted "on a first perusal" (p. v.), together with certain passages which appear in small print, and the whole of Book V. on "Money and the Mechanism of Exchange." This plan is, we think, unsatisfactory in an elementary book. The small print passages would be much better placed together at the end in the form of notes to the chapters in which they occur, and we can see no good reason why a beginner should postpone the study of so important a subject as Money and Banking until he has mastered the other branches of economics. In fact, we think it would be difficult for him really to understand the theory of international trade, which, by the way, Professor Chapman discusses before he deals with money, without some knowledge of the theory of money. Owing to the somewhat unusual arrangement here adopted, Professor Chapman has to anticipate in his chapter on "International Trade" the quantity theory of money, explained in the book on "Money," which is to be omitted on the first reading. Again, the author recommends only a hasty scanning of Book I. in the first instance; but Book I. is so difficult and so full of unexplained technical terms as to make a hasty scanning of it quite useless, even to an advanced student. Even the parts of the book which are to be read by the beginner bristle with difficulties, and contain definitions and explanations which might, we think, have been made a good deal simpler, without loss of accuracy. Here, *e.g.*, is Professor Chapman's definition of demand: "Demands . . . are the quantitative objective definitions of preferences" (p. 24). Again, marginal utility is defined as "the reduction of total utility caused by a minute curtailment of our consumption of a commodity" (p. 30), and this precedes the definition of total utility. The part played by capital in bringing about a roundabout process of production is not very clearly explained, the section headed "A Plausible Fallacy" in chapter xxi., entitled "Theory of Banking and Credit Money," appears to us most obscure, the table in the otherwise excellent chapter on "Interest" (chapter xxv.), which is used to illustrate the way in which a market rate of interest arises, although ingenious, requires further explanation in order

to make its meaning quite clear, and the section on the "Theory of Barter," in chapter xiv., is unnecessarily elaborate. These are only a few examples taken almost at random from many which might have been selected.

The book would, we think, have been greatly improved by some sections on descriptive economics, *e.g.*, a section explaining the present distribution of the national income at the beginning of Book VI., on "Distribution," and a chapter on the history of economic theory is much needed, especially as the book, as far as we can discover, does not contain a single reference to any writer on economics, alive or dead, except Adam Smith, who is only mentioned once, and then, perhaps as might have been expected, in connection with pins. The bibliography at the end of the book is a very meagre one, a fact that makes a chapter on the history of economic theory still more to be desired. There are few references to history, which would have been useful for purposes of illustration, *e.g.*, in chapter x., on the growth and specialisation of businesses.

We cannot help wishing that the author had been able to see his way to discussing more fully some of the practical economic problems of the day. It is true that some of these are dealt with in Books VI. and VII., but he often fails to get to sufficiently close quarters with the points at issue, and has a way of saying "I must not pause to argue controversial points." In this connection his treatment of the question of the effects of machinery (pp. 82-4) seems to us unsatisfactory, as the line is not drawn between the long-run and the short-run effects, while the importance of the latter is underrated.

We think the book would have been made more interesting had Professor Chapman made more use of existing institutions in pointing out the application of theory, and had he explained his theories by reference to well-known economic facts, instead of constructing hypothetical cases. There is no need to construct a hypothetical bank in order to explain the principles of banking; this can be done just as well by reference to the operations of an ordinary joint-stock bank, and the subject will in this way at the same time be made more interesting. Again, why should not the shifting of the incidence of taxes be explained by means of existing English taxes, such as the inhabited house duty and the income tax? Certain subjects have, we think, insufficient space allotted to them, *e.g.*, the subject of national debts is dismissed in eight lines, trusts and kartels in five pages, which do not contain a single example of a trust or a kartel, and co-

operation is only allowed another five pages, which also contain remarks on labour co-partnership and other subjects.

The book appears to us to lack arrangement in several places, and some of the chapters suggest little more than a series of lecture notes hastily put together; this is particularly true with regard to chapters vii. and xxii. In fact, Professor Chapman often seems to forget that he is not lecturing, as he speaks of himself sometimes as "I" and sometimes as "we," while the reader is constantly referred to as "you," and he talks of having "no time" when he means "no space."

We venture upon these criticisms in no carping spirit, but only in the belief that the book, useful as it will undoubtedly be to somewhat advanced students, might easily be made still more valuable. That it is unsuited to the needs of beginners we are convinced.

The authors of the second book under review have, we think, more nearly succeeded than Professor Chapman in accomplishing the difficult task of writing a satisfactory text-book for beginners. In his introduction to the volume, Professor Urwick says that "existing text-books on Economics . . . are usually too technical, and always too dull" (p. xi.), two defects which the authors have, on the whole, been very successful in avoiding. The book is divided into two parts. Part I., for which Mrs. McKillop is responsible, is descriptive. Most of what it contains it is important that the student of economics should know, although little of it falls under the head of economics proper. The first six chapters are on economic history, and chapters vii. and viii. discuss domestic economy. In these two chapters the various heads of an ordinary family budget are considered. The items "rates and taxes" lead the author on to questions of local government, the history of education and the poor law, a description of the various heads of central expenditure and revenue, an account of our political institutions, the Cabinet, the party system, &c., and the government of our Colonies. These subjects occupy the remaining nine chapters of Part I.

Part II., written by Miss Mabel Atkinson, contains a good elementary sketch of the outlines of economic theory. She has, we think, done rightly in "discussing exchange and the fixation of price" (p. viii.) before production and distribution, but we doubt whether she has been equally wise in treating the theory of money, credit, and the foreign exchanges before explaining the theory of value. The chapters dealing with these subjects, clear though they are, might be made still easier for the student

to follow had he first acquired some knowledge of value. Many of the more difficult problems of economics Miss Atkinson has, owing to the elementary nature of the book, been obliged to leave on one side, but her treatment of the questions which she has discussed is, on the whole, accurate and remarkably lucid. The distinction between utility and value might, however, have been more clearly drawn, and the author appears to regard Mr. J. A. Hobson's theory of under-consumption (chapter xx.) with more favour than we think it merits. •

There are several curious slips and inaccuracies in both parts of the volume. "The price of wool became so high" would be better than "dear" on p. 38; Calcutta is not on the west coast of India (p. 52). Did not the Hudson Bay Company exchange guns for skins, and not skins for guns (p. 56)? The note at the end of chapter v. (p. 64) is not in its right place. Mr. Gladstone did not appeal to the people on his Home Rule Bill in 1885 (p. 165). Anson's *Law and Customs of the Constitution* should be *Law and Custom* (p. 183). It is not quite apparent why bearer cheques make forgery easy (Part II., p. 34). "Franc" appears where "sovereign" is meant on p. 43, and "creation" for "creator" on p. 195. There is no customs duty on lace in our tariff (p. 207). We cannot understand why precisely the same bibliography, which, by the way, is rather weak on the economic side, appears at the end of each part of the book. There is a good marginal analysis, but this by no means atones for the absence of an index, or for the meagreness of the list of contents. These are defects, however, which could easily be remedied in a second edition.

The book is particularly readable throughout, and should interest beginners generally, as well as girls, for whom it is especially, though not exclusively, intended.

H. SANDERSON FURNISS

Allgemeine Volkswirtschaftslehre. By WILHELM LEXIS.
(Berlin and Leipzig: Teubner. 1910.)

PROFESSOR LEXIS' contribution to the series of volumes issued under the general title *Die Kultur der Gegenwart* is arranged in many respects according to an order differing little from that familiar to economic students in this country. After a brief sketch of the historic development of economic organisation and a discussion of economic method, the topics follow one another as follows:—Value, demand, production, supply, price, money,

distribution, crises, consumption. In this enumeration some of the discussions of relations between the various factors in the economic organisation have been omitted, but a rough general idea is given of the order of development of the subject. In regard to a great part of the volume, which compresses into 240 pages a remarkably full discussion of many subjects of the highest interest to the student of modern developments, it will be sufficient to say that it is written by a master, whose thorough grasp of his subject and skill in exposition is manifest on every page. It will quite obviously be necessary for the reviewer to confine himself to selected topics in order to keep within limits acceptable to the Editor.

One point of considerable interest is found in the discussion of the relation of value to cost. Among the elements of cost the interest of capital is commonly included, and assumed to tend to a "normal" level. Such a normal rate of return to the capitalist Dr. Lexis regards as not conformable with experience. He admits that in the calculations which precede the undertaking of productive operations such a rate may find a place, but not in the realised returns. Failure to secure normal returns cannot in practice be readily followed by the withdrawal of the capital involved, though such failure over any field of production will tend to restrict new investments in that field, and thus gradually result in effective reduction of enterprise there. Further, individual undertakings are found to yield returns which, though varying greatly, group themselves more closely about the neighbourhood of the average return than elsewhere, so that the average has a certain special significance, though not as a determining factor. A reduction of the earnings of capital below a certain minimum, however, may be fatal to the individual *entrepreneur*.

But, in addition to challenging the view which many writers have held, that a certain normal rate of interest is a necessary and determining element in value, Dr. Lexis goes further and definitely sides with those who have asserted that cost of production in general cannot be held to be determinative of value. He points out, what may be admitted, that expansion of production commonly takes place, not by the introduction of fresh producers whose costs were too high to secure them a place before expansion of demand occurred, or contraction by the elimination of such marginal producers, but by the increase or decrease of the output of the strongest and most efficient firms far within the margin. He concludes that value determines the conditions of production which are marginal, not the converse. It is sufficient here to

state the contention, without entering on a discussion of its validity. Rent of agricultural land, we may note, is held to be determined by the price of produce, not price by rent (pp. 95 and 176). Yet elsewhere (p. 42) we find reference made to the effect of a higher value of land in causing higher values of commodities produced from it. It is possible that this reference is to a class of case in which pure Ricardians have found such an effect admissible, though it does not appear on the surface that special conditions are conceived of as existing.

In the development of the discussion of distribution our author makes use of symbolic representation of the quantities under discussion, though not using the symbols as a logical apparatus. They make clear, however, that he is performing the mental operation of dividing capital and product according to the purpose served, illustrating the drift of thought which, in its full development, gave us the Wages Fund doctrine, a doctrine not accepted, it may be noted, by our author. The separation of product into goods for workmen's consumption, goods for the consumption of the capitalist class, and goods for the expansion of the productive apparatus of the community (p. 226) is the most developed illustration of a tendency which is observable in various places in the volume. In the inadequate adjustment of the third section of the produce between goods preparatory to those of the first and of the other two sections is found a source of industrial crises. Useful as the conception may be, and it will not be unfamiliar to readers of Professor Taussig's *Wages and Capital*, there appears to be some danger that a misleading conception of the precision of the separation may find a home where much use is made of the idea, and that it may thus be found a somewhat dangerous weapon.

A large amount of useful information is contained in Dr. Lexis' volume, for he follows the good practice of illustrating his discussions from the facts of business. We may mention, for example, a discussion of the extent to which the use of cheques in Great Britain economises cash, where the interesting conclusion is ventured that, were it required to replace cheques by banknotes, not less than 400 million pounds sterling in notes would be required to do the work accomplished by our system of deposit banking (p. 124).

In some ways the most interesting of the chapters is that in which the outlook for the future is discussed. We would gladly cite freely from the chapter did space permit, to avoid any risk of misrepresentation. The present system will, in Dr. Lexis'

view, need substantial modification as population increases in countries now sparsely peopled, since this will reduce the supplies available for the more densely populated regions, now increasingly dependent on importation to supplement their own resources. Concentration of production will develop, and measures for controlling the vast businesses which will result will be necessary, ending in the assumption of complete responsibility by the State in many instances, in fact wherever freedom for experiment is not a condition of success. Conceiving that State management need not be less efficient than that of a gigantic corporation, our author looks for a source of revenue from the profit of such government enterprises which may meet the demands of extended social insurance.

Technical developments, increasing the efficiency of productive operations, and especially reducing the amount of capital required, may be expected to increase the production of consumable goods relative to instruments of production, though this may not necessarily raise wages. The growth of population and the gradual exhaustion of the more accessible supplies of coal, iron, copper, &c., will require a revolution in methods of production, and the exhaustion of these industrial materials may be expected to precede the extreme pressure of population on food supplies. Within four or five centuries, even if a relatively slow rate of growth of population be experienced, the difficulties indicated will arise. The State will need to interfere in the interests of the masses to prevent evil results from increase of ground values, and to ensure a production of timber in view of scarcity of coal and iron.

In the nearer future an improvement in the position of the working classes is anticipated, while the development of social characteristics is expected to reduce the acerbities of the struggle for existence. In the present, while as yet Nature's resources remain abundant, a development of unity and a sense of solidarity may be attained which will be of the utmost importance at a later stage. Dr. Lexis' conclusion is that the general lot will be one of toil and trouble and that, spite of all our progress, we cannot look for the coming of a golden age.

A. W. FLUX

Theory of Political Economy. By W. STANLEY JEVONS.
Fourth edition, edited by H. Stanley Jevons. (Pp. lxiv + 339.
London: Macmillan. 1911. Price 10s. net.)

THE appearance of a fourth edition of Jevons's *Theory of Political Economy* is further proof, if proof were needed, that the

work of an original thinker, who is also a brilliant writer, can never be superseded. There is little in Jevons's *Theory* which has not by now been much more accurately expounded elsewhere ; but it is an economic classic which economists will wish to read, no longer perhaps for the theories it contains, but always for the contact which every reader of it can thus enjoy with the fascinating mind of the author. To the present edition Mr. H. Stanley Jevons has added some interesting appendices, which afford an excellent excuse for taking up the volume again. In the first he defends his father's *Theory of Interest* against some criticisms of Dr. Marshall's (*Principles*, sixth edition, p. 520). In the second he prints a fragment on Capital (of no great importance), which was originally intended to form part of Jevons's *Principles of Economics*. In the third he reprints the paper originally read by Jevons to the British Association in 1862. And to the bibliography of mathematico-economic books he adds a few notes found amongst Jevons's papers.

With regard to the first, I am not satisfied that Mr. H. S. Jevons altogether disposes of Dr. Marshall's objections. He has, in effect, employed against Marshall the latter's method in defending Ricardo, arguing that Jevons "undoubtedly wrote, not for the general public, but for students already familiar with the current economic doctrines," and that he seems to assume the correct theory in other passages. But in expounding his own theory, Jevons certainly appears to write, as Marshall points out, concerning a part of the theory of interest as if it were the whole. Yet if Jevons had seen *explicitly* (which is the point) as much of the theory of interest as Marshall has seen, it is likely that so clear a writer would have tried to express it. The issue is not an important one, but it serves to illustrate very well the contrast between Jevons and Marshall :—Jevons perceiving some one part of the theory with penetrating clearness and illuminating it to the utmost possible extent ; Marshall, exhaustively aware of the whole theory and its interconnections, but discarding, in his attempt to take in the whole stage at once, the limelight which, presenting some parts in a more brilliant aspect, must necessarily leave the others in a greater obscurity.

Jevons's Paper before the British Association in 1862 was reprinted in *The Statistical Journal* in 1866, but it is useful to have a document, so important to the history of economic theory, in a more accessible form. It contains hints, expressed in the briefest manner, of a surprisingly large part of the fundamental contributions to the subject published in the *Theory* nine years

later (final degree of utility is here termed *coefficient of utility*). The earlier essay contains practically no reference, however, to diagrammatic methods. In this connection it is very interesting to notice a comment, now printed, I think, for the first time, appended by Jevons to Professor Fleeming Jenkin's essay of 1870 :—"I may add that from about the year 1863 I regularly employed intersecting curves to illustrate the determination of the market price in my lectures at Owens College." The historian of the early developments of mathematical economics will have, if he goes behind priority of publication, many puzzling problems to determine. The above passage may possibly assist him in settling one of them.

J. M. KEYNES

A Study of Indian Economics. By PRAMATHANATH BANERJEA, M.A. (London : Macmillan. 1911. Pp. 221. 3s. 6d. net.)

It is a very encouraging sign of the times that books by Indians upon the economics of their own country are multiplying fast, and that the books now being published bear evidence of serious study and a determination to find the truth whether palatable or unpalatable to this or that school of thought. As a little handbook for beginners, Mr. Banerjea's book satisfies these two essential postulates, and it has the further great merit of being admirably written; the English is always idiomatic and sober, and is altogether free from the "woodenness" into which all writers in a foreign language are liable to fall.

It would be unreasonable to expect to find in a handbook any important contribution to the study of Indian economics, and it is no disparagement, therefore, to say that there is little that is new in Mr. Banerjea's work; he has taken his facts from the *Imperial Gazetteer* and the voluminous statistical publications of the Government of India, and has shown their relation to the economic theory of the universities. I am not quite satisfied that he has always appreciated to the full the teaching of the academic economists; his statement, for instance, that the Ricardian theory of rent has practically no application in India requires very much fuller proof than he has given to it, and the further assertion that "the conclusion drawn from that doctrine, namely, that rent forms no part of the price of agricultural produce, is also inapplicable to the case of India," can only proceed from an imperfect reading of Ricardo. •

The main outlines of the industrial organisation of India are

now fairly well understood, and what we chiefly need is the special study of particular problems connected with India's economic development; there is much, especially in what may be called the economic history of India, which needs conscientious spadework, and it is work of a kind which Indian scholars alone are competent to perform. Mr. Banerjea refers with tantalising briefness to "the caste guilds of ancient times." "Each caste," he says, "was to some extent also a trade guild. As a trade union it used to insist on the proper training of the youth of its craft, to regulate wages, to deal with trade delinquents, and to supply courts of arbitration for the settlement of disputes." This is just one of the questions upon which we need historical evidence, and if Mr. Banerjea knows anything about the trade guilds of ancient India I hope he will lose no time in publishing it; there is here material for a most valuable and interesting monograph, and it is by the preparation of such monographs or special studies that our knowledge of Indian economics can be best advanced in the immediate future.

THEODORE MORISON

Le Chômage et son Remède. By DANIEL BELLET. (Paris : Félix Alcan. 1912. Pp. viii + 282.)

THIS treatise on *Unemployment and its Remedy*, by M. Daniel Bellet, secretary of the French Political Economy Society, and professor at the School of Political Science, is prefaced by an introduction by M. Paul Leroy-Beaulieu, which is mainly devoted to a vigorous attack on the (British) Insurance Bill. In discussing the causes of want of work, M. Bellet does not attribute any real importance to the introduction of machinery, because this takes place, not suddenly, but gradually. The shifting of industrial centres is one cause of unemployment, and in this respect protective tariffs have to answer for a good deal. Industrial legislation has a marked tendency to create unemployment by rendering specific branches of industry so unprofitable that works have to be shut down. We are sometimes told that one cause of unemployment is to be found in the abuses incidental to certain forms of competition and speculation, but "we much wish that we could be told at what point these abuses commence to exist; and for our part we ask whether those who are termed speculators are not, as a fact, just those men who more than any others open up new spheres of activity for the unemployed." Much unemployment is caused by commercial crises; but these "slumps

tend to localise themselves to a great extent in the country in which they originate"; and "the workmen thrown out of work by a slump in any one country would very probably find work in some other quarter of the globe." In conclusion, "it is the inadequacy of information (as to opportunities of employment), and the practical difficulties (still of a serious character) in the way of removal from one place to another, that constitute the predominant causes of unemployment."

M. Bellet is of opinion that there is a tendency to exaggeration on the part of working-men, and especially of those who put forward claims on their behalf, both as regards the extent of unemployment and the distress which it causes. He believes that, more often than not, workmen thrown out of work in their own trade can, if they really want to, find some other kind of employment. The statistics of unemployment published in different countries M. Bellet considers to be inaccurate and imperfect in the highest degree; but so far as they go, they show that it is for the most part the unskilled who are affected by want of work, while men who possess a skilled trade "are sure never (practically speaking) to be unemployed, especially when, together with their technical knowledge, they display zeal in their occupation and their personal character."

The different remedies that have been attempted or proposed for the removal or alleviation of the evils incidental to unemployment are examined in detail. Thrift is sometimes put forward as a remedy, but is not appropriate or adequate, being merely the effort of an isolated individual; "what is sought for, in regard to unemployment, is some plan which will make it easier for a man to face the evil than if he were left to his own resources." As to unemployment insurance, while, with the exception of the British trade unions (which M. Bellet quite wrongly supposes in all cases to pay unemployed benefits), there is hardly anything to be found in the way of real insurance—free from the taint of public subventions, an examination of the experiments which have been made in this direction, whether on the lines of self-help pure and simple, or supplemented by this thinly-disguised form of poor-law relief, shows that all have, to a greater or less extent, proved inadequate to achieve their object. The true solution of the problem is declared to be the establishment by private effort, and on a profit-making basis, of labour registries, run on competitive lines but linked up by mutual agreement into a national system. Our own official Labour Exchanges "do, indeed, fill a certain number of vacant situations, but this number

constitutes only a relatively very small proportion of those offered by employers." They are worked by "mere officials, who are under no inducement of personal interest to find places for their clients, nor even to do their best to make themselves acquainted with the demand for labour." Again, "In the last place, and above all, it is impossible (as past experience has amply demonstrated) that an official organisation should keep itself constantly supplied with the most recent information as to the state of the labour market throughout the whole of the country, as would be done by a private undertaking anxious to earn its commission and stimulated by personal interest to find jobs for workpeople applying to it, and to provide employers asking for labour with the men they require."

In these conclusions it is not likely that many people in this country will be found to agree. Certainly, if we had decided to wait for the establishment of labour exchanges throughout the United Kingdom until private enterprise should have organised such a system on strictly commercial lines, we should have had to wait a very long time indeed; and the probability that any such profit-seeking undertaking would ever do the work anything like as well as it is done by the Board of Trade must be considered to be extremely remote. But, in truth, the attitude of M. Bellet towards any and every intervention on the part of the public authorities is (to use his own words) one of "uncompromising ferocity"—an attitude not wholly compatible with the scientific treatment of the important and difficult problems with which he has undertaken to deal.

DAVID F. SCHLOSS

Unemployment: a Social Study. By B. SEEBOHM ROWNTREE and BRUNO LASKER. (London: Macmillan and Co. 1911. Pp. xvii + 317. Price 5s. net.)

AN extraordinarily detailed and successful treatment of a very narrow problem, best describes what has been accomplished by this book, both the machinery of the investigation and its area, namely, the city of York, which possessed at the time a total population of about 82,000, being those of Mr. Rowntree's better-known work on *Poverty*. Some sixty investigators visited every working-class family in the city to discover the situation of its members as regards employment on June 7th, 1910, and a smaller number checked the information, and so far as possible obtained full details of every single case of unemployment. It was

found that on that day, 1,139 men and 139 women were unemployed, representing 4.4 and 1.9 per cent. respectively of the occupied members of each sex over ten years of age.

The chief results of this investigation are three. First, a singularly complete census and an almost exact enumeration of the numbers unemployed on the given date have been obtained, though it is just possible that a few first-class workmen preferred to conceal the fact that they were unemployed. Secondly, the detailed information available has made possible a classification of the unemployed into different groups, and the assignment of each individual to his own group. These groups are six in number: youths under nineteen (129), regular workers (291), casual workers (441), men in the building trades (173), the work-shy (105), and women and girls (139). Each class has a chapter devoted to it, and the authors are thus able not only to speak to the general influence of physical, moral, and industrial causes, but also to estimate the proportions of each class who owe their unemployment to one or the other cause. Thirdly, the authors possess detailed information of every unemployed person and his family in York, and give a wide range of details in tabular form, and this serves to drive home the fact that the problem is largely one of the individual man. We may divide unemployment into a number of classes and even put each man into his proper class. But as Mr. Beveridge has shown, unemployment, being due to a variety of causes, differs in character from one individual to another. Doubtful cases are classified with a near approach to certainty.

In reference to York, therefore, the treatment is both accurate and complete, and some of the conclusions have a most important bearing on the general problem. The building trades there have experienced a prolonged and pronounced depression, following a boom no less marked; and the cause of the former has been the same as elsewhere, namely precedent overbuilding. The size and permanency of the products of the trade cause the effects of overproduction to be greatly prolonged, and thus each depression lasts a considerable number of years, and the boom that follows is proportionately pronounced. Hence the building trades not only obey to some extent the ordinary cyclical fluctuation, but experience an additional one of longer duration. So much the experience of York confirms. Secondly, the city has few or no large industries which depend much on casual labour, and its two chief ones—the railway works and cocoa and confectionery manufacture—are unusually stable as regards numbers employed. Considerable fluctuations in the former are almost entirely met

by short time. Nevertheless, the very large amount of casual labour in the city is, as the authors point out, significant.

As a whole, however, York cannot be taken as typical of the rest of the country. Trade in its fluctuations there is held by the authors to lag somewhat behind the rest of the country, and in June, 1910, had reached a point "about half-way between normal trade and acute depression," whilst in the country as a whole employment was fairly good. On the other hand, taking one year with another, unemployment in York is probably below the average, for the reasons given in the last paragraph. But the fact that on the whole the problem is not so acute in York as it is elsewhere only renders more significant the results of the investigation.

The question of remedies is fully treated, and the authors have, at the risk of repetition, considered in turn those that are applicable to each type of unemployment. On the whole this is an advantage, the more so as unemployment involves a group of problems rather than a single problem, and therefore lends itself to this subdivision of treatment. A brief reference may be made to the two chief proposals. The first consists in the establishment of schools for unemployed juveniles, specially adapted to provide for short and irregular periods of unemployment. This has much to recommend it, especially if accompanied by fuller provision for general industrial education and for organising boy labour. The scheme might be extended to the case of unemployed adults so as to pave the way for the removal of the chronically unemployed from the labour market into institutions for training. The second proposal is to decentralise the homes of town workers by means of travelling facilities, and thus to enable them to live in the country and cultivate a plot of land. The produce of this would save them from the worst miseries of prolonged unemployment, and the more irregular workers could fill up their spare time in cultivating larger plots. To render this possible a far more complete organisation of the labour market would be needed, and the authors do not perhaps realise all the difficulties. But the plan has proved a success in Belgium, and even if in England we could only hope for its partial application, it is still well worth consideration.

N. B. DEARLE

Boy Labour and Apprenticeship. By REGINALD A. BRAY, L.C.C.
(London: Constable and Co., Ltd. 1911. Pp. xi+248.
Price 5s. net.)

THE Minority Report of the Poor Law Commission included among its recommendations some very sweeping proposals for

dealing with boy labour and industrial training. Its chief proposals were the raising of the school leaving age to fifteen, prohibition of the employment of school-children for wages, and the compulsory attendance of lads until eighteen at some place of education *for at least half the working day*. The first suggestion is very generally accepted, and the second is approved by most experts, except perhaps in the case of agriculture. The third, however, is still a matter of acute controversy, as, whilst possessing some great merits, it is open to a number of very serious objections. Mr. Bray is a convinced and enthusiastic supporter of all three policies; and I do not think I do him an injustice in saying that the object of his present book is mainly propagandist.

Its great merit lies in the excellent system on which it is arranged, and in its clearness and lucidity. Those parts of it, too, which deal with the child of school age are often excellent. It is in reference to boy labour that it is most open to criticism. The essentials of apprenticeship—supervision, training, and the provision of an opening—are described in the first chapter; the old apprenticeship system in the second; and the age of reconstruction in the third. The author then proceeds to outline the work already done by the State in reference to the above essentials, and this chapter contains an interesting *résumé* of existing laws relating to child labour. The next one on *Apprenticeship To-day* covers every form of industrial training, and deals with all types of employment. This has four parts—the Contributions of the State, Philanthropy, the Home, and the Workshop, the last of these containing a detailed description of London and a general survey of other towns. The treatment of London, however, makes the mistake of taking the building and wood-working trades as typical of all others, which they are not, and of ignoring the printing trades, where workshop training is generally admirable, and of others such as engineering, art metal, and instrument making where the position is, on the whole, not unsatisfactory, in spite of some defects which better organisation could cure. Even in the selected trades some excellent work is being done. As regards skilled trades in other towns, too much appears to be made of an unduly pessimistic report on a single town—Glasgow—and too little attention is paid to more favourable evidence from elsewhere. Taken as a whole, then, the treatment of workshop conditions shows traces of insufficient investigation of facts.

The constructive proposals of the book are contained in the

final chapter on Apprenticeship To-day. As regards several it is possible to concur heartily with Mr. Bray: but his arguments for his main scheme of a new half-time system do not carry conviction. To it there are a great number of objections in addition to those of the parents, which he does treat effectively; otherwise, not only does he not deal with them, but he does not even seem to recognise their existence. They are airily waved aside with the remark that "we should see, as we have always done in the past, the employers . . . adapt themselves with admirable success to the new system." Yet the dangers are many, namely, the increase in the amount of blind-alley employments in some trades which this scheme would tend to bring about, the tremendous inconvenience that would often be caused to the employer, the impossibility in many cases of doing much in the earlier stages of training anywhere but in the workshop, and the great danger to workshop teaching itself. For this, after all, must remain the chief basis of industrial education, and though more and more it needs to be supplemented by the trade school, the latter still remains subsidiary and complementary.

The result is that Mr. Bray's advocacy of his policy is not convincing. What we require from supporters of any large scheme of reform is, first, that they should grasp its difficulties, state them, and, to the best of their power, meet them. But he has not done so at all, and appears hardly to be aware of their existence, still less of their extent; secondly, such a scheme should so far as possible be worked out, not necessarily in detail, but in its broad outlines. In this book we are told that this is to be done, and that and the other thing; but not at all, or only in a very sketchy way, how they are to be carried out. Nor are matters improved by the very incomplete character of some of the information. Hence the scheme remains frankly a paper one, the practical working of which is still largely unknown. It may work well or it may not; personally, I incline to the latter view, but in any case we are not put in possession of the facts and details for forming a judgment.

N. B. DEARLE

Social Conditions in Provincial Towns. (First Series.) Portsmouth, Worcester, Cambridge, Liverpool, Edinburgh, Oxford, Leeds. Edited by MRS. BERNARD BOSANQUET. (London: Macmillan. 1912. Pp. iii + 82. Price 1s. net.)

DESCRIPTIONS of the social conditions in provincial towns, by persons who "have lived and worked for years in the surroundings—

described," cannot fail to be interesting, but when they are very short one is inclined to doubt their utility. For one fears to find no more than lists of agencies, and statistics of institutions the necessity for which is not now disputed. But the writers of this series have succeeded, even in the small space at their command, in doing more than merely to state figures and bald facts, and the reader in closing the book feels that in addition to knowing such things as the relative numbers of school children in Portsmouth, Oxford, and Liverpool, he realises also the extraordinary difference between the atmosphere of a naval port and that of a university or a great centre of industry.

The desirability of certain elementary reforms apply to all towns alike: reforms of sanitation, housing, hospital management, &c.; but the importance of these is becoming too widely recognised for the need of much exposition. The attention of reformers is now being turned to more complex problems, especially those of unemployment and the industrial training of the young; and this complexity partly arises out of the impossibility of legislating for all towns alike. Our horror of parochialism may lead us into easy generalisations, and the essential differences between English provincial towns (interpreted, as Mrs. Bosanquet explains in the Introduction, to include all towns except London), are in danger of being underestimated. The average man has not usually any opportunity of knowing many towns intimately, and there are not many books which can in a small compass give him a picture of the conditions of life elsewhere. Without some wider knowledge than that obtained by his own observation, it is not much good to take an Englishman from a small country town to a German manufacturing centre and then to ask him to compare the conditions of labour in England and Germany. Nor is it much good for a man from a centre of industry to express views on the elementary education required in a small agricultural town until he realises that size is not the only distinction between a small town and a large one.

A series of sketches such as those edited by Mrs. Bosanquet may therefore help to fill serious gaps in our sociological knowledge, and all the accounts of this first series leave a distinct impression on the mind of the reader. Those writers have, however, been most successful who have interpreted "social conditions" in the widest sense.

M. N. KEYNES

Monopoly and Competition: a Study in English Industrial Organization. By HERMANN LEVY, Ph.D., Professor in the University of Heidelberg. (London: Macmillan. 1911. Pp. 333.)

THIS is a translation of a German book which was reviewed in the ECONOMIC JOURNAL two years ago. As the change of form is not attended with any substantial addition to the contents, we have little to add to Professor Ashley's appreciative review. Our task is nearly finished when we have recorded our impression that the translation is at once accurate and elegant. It may be useful also, in introducing the English translation, to point out some contributions to economic history which cannot easily, if at all, be found elsewhere in English literature. Of this character is the description of some coal monopolies in England which have been hardly noticed by recent English writers. Professor Levy also contributes something new to most English readers when, for the purpose of comparison with England, he sketches the history of monopoly in Germany. It appears that monopolies of the older type excited less hostility in Germany than they did in England, and so survived to within living memory. Here, too, we may observe that our author, while reproducing many of the facts described in Mr. Macrosty's *Trust Problem*, has often enhanced their value by continuing the narrative beyond the point at which it was left by Mr. Macrosty.

A reviewer who has no first-hand knowledge of the facts set forth in this volume cannot hope, by his endorsement, to enhance the credit which already attaches to the name of the author. But the want of special knowledge on the part of the critic is not a complete disqualification for appreciating the skill with which an historical writer presents his facts. Rather, the need of such skill is not adequately felt by specialists who, through long working at research, have developed an interest in its results. For other readers economic history is apt to fall flat, wanting qualities peculiar to each of the elements out of which it is compounded; without the severe charm of economic theory, without the personal interest of political history. How has Professor Levy met these difficulties, which are particularly great in that part of his work which deals with "old unhappy things," such as the patents and monopolies in the times of the Stuarts? It would be surprising if in an international competition the prize for lucidity were to be assigned to a writer of our author's nationality. But we may admit that he has come up to the standard set by many of the English writers on such subjects.

Lucidity depends largely on logical arrangement, a quality in respect of which we can bestow unstinted praise upon this study. As an instance of a scientific classification, we may mention the division of British industries with regard to their immunity from foreign competition, into (1) those which are only *conditionally* sheltered, *e.g.*, by heavy freights, without any advantage in the way of production; (2) those which are *unconditionally* protected, *e.g.*, by superiority of technique; (3) those as to which international agreements are possible. Again, we would refer with approbation to the explanation of the circumstances which led the English economists (J. S. Mill excepted) for the most part to assume the prevalence of competition. A question which exercises the reasoning powers in connection with this subject is the relation between Protection and the formation of trusts and cartels. Our author takes up a moderate position, removed, on the one hand, from the exaggerations of fanatical Free Traders who will have it that Protection is the root of *all* evil, and, on the other hand, from what Adam Smith calls the "sophistry of merchants and manufacturers." Monopoly without Protection is very possible in the second and third of the cases above distinguished, and, to some slight extent, in the first case. But the tendency to monopoly would be greatly increased by Protection. "A great many industries in which foreign competition has so far prevented a monopolist combination would under a tariff straightway be in a position to found cartels and trusts." A tendency of which the strength depends so largely on a political issue does not admit of confident prediction. This may be the reason why our author confines himself to the following cautious utterance as to the future growth of monopoly in England. "In large spheres of industrial production a change in organisation is dawning which will offer new economic problems both to the student and the statesman."

F. Y. EDGEWORTH

The Evolution of Industry. By D. H. MACGREGOR, M.A. (*Home University Library.*) (London: Williams and Norgate. 1911. Pp. 254. Price 1s. net.)

THE object of this book, as its author explains in his preface, is to "describe the recent changes which have given us the present condition of the working classes." He says "it has only been possible to give an outline of events, and to suggest the principles which seem . . . to be involved" (p. v.). But he is,

we think, too modest with regard to the work he has accomplished, for the book is a more important contribution to the literature of the subject with which it deals than this would lead the reader to expect. It contains, besides a masterly sketch of the economic history of the nineteenth century, a most suggestive analysis of the industrial system of our own day. We cannot do more here than indicate a few of the problems discussed by Professor Macgregor.

The question raised in the first chapter is: how has it been found possible in the nineteenth century to make the resources of the land, subject as it is to the influence of diminishing fertility, supply the increasing wants of the people of growing nations? And the answer suggested is that this has been made possible by means of invention and organisation. A great part of the book is occupied in tracing the growth of and explaining the different forms of organisation which have evolved with the object of solving this problem. "Does the nineteenth century represent the evolution of an economic idea?" (p. 41) is the problem discussed in the second chapter. "It is possible," Professor Macgregor thinks, "to show that the century does have a single great tendency which works itself out on every side of national life. The fundamental idea of the nineteenth century is power" (p. 41), and "the method by which the ideal of power has been obtained has been combination" (p. 43). Several chapters are therefore devoted to an examination of the various forms of combination which have been built up during the century, and these are full of reflections well worthy of consideration on both the history and meaning of trade unionism, trusts, municipal trading, co-operation, profit-sharing, labour co-partnership, and the relations of employers and employed generally. Chapter IV. contains a particularly good account of the inquiries which have been made into social conditions during the last twenty years and their results.

Professor Macgregor has a happy way of saying a great deal in a single sentence; here are one or two examples: the period comprising the first twenty-five years of the nineteenth century is aptly summed up as "the age of everything done wrong" (p. 15). "An insecurity of status under the government of other people" (p. 128) seems to put in a nutshell the problem of employment, and the historical definition of poverty as "failure to participate in the new known goods of each period" (p. 14) seems to us excellent. The book contains a great deal in a very small compass, and much condensation has been necessary; this

makes it somewhat difficult reading, but it will well repay careful study. It should be not merely useful to the student, but also suggestive to the trained economist. An analytical list of contents would be an improvement.

H. SANDERSON FURNISS

L'Evolution Industrielle de la Belgique. By J. LEWINSKI.
(Bruxelles and Leipzig: Misch et Thron. Travaux de
l'Institut de Sociologie. 1911. Pp. 440.)

THAT the author is sociologist as well as economist will widen the circle of his readers, and assist the student in grasping his point of view. The introduction is devoted to a rather extensive examination of the methods usually employed by economists, and of that which he himself proposes to adopt. The prominent position given to methodology in an economic study of this kind may be questioned, but its usefulness is undeniable. The purpose of the book is not to examine *all* the problems connected with the subject. "We are content simply to analyse some of those fundamental problems towards the solution of which industrial statistics and research have furnished us with material hitherto neglected." He intends to combine the inductive and the deductive methods, first to examine the theories connected with each part of the subject, applying general theories where special ones are lacking, and then to see how far historical facts verify the theories. The methods of Adam Smith, Schmoller, and the modern schools of Germany, Austria, and England, are carefully discussed, and the author concludes with some useful information on terminology, in which he proposes to follow Bücher rather than Sombart.

The first part is a contrast of the life of the people of Belgium at the end of the eighteenth century in the towns with their life in the country. The author brings out clearly the prosperity of the agricultural population, owing to the different employments which they could dovetail into the periods when no work was needed on the land. Following this, each town with its different industries is separately described. Chapter ii. discusses the views of Adam Smith and other economists as to the causes of the Industrial Revolution, contrasting the thoughtful analysis of the former with the "superficial theory" of the Schmoller school. Dr. Lewinski notes three direct consequences of the increase of population in Belgium, and thus formulates his own theory. "It was the increase of population which rendered necessary the

industrial revolution." In support of this he quotes various authors, but does not explain why increase of population, a factor never entirely absent, should have effected such a result at that particular period. Later on he himself points out that Coste in his writings forgot the dense population of China and India where domestic industries still predominate. But he does not remove the difficulty.

The rise of the proletariat, and its effect on the rural industries, is traced to three causes which Dr. Lewinski similarly explains as direct consequences of the increase of population. The question of industrial capital is likewise fully treated. Statistics are given with regard to the wealth of the clerics, nobles, and merchants in 1794, and the events are described which made it available for industry.

The psychological influences are not neglected, and here one sees the advantage of the treatment of economic questions by a sociologist. Chapter vii., which the reader is advised *parcourir hâtivement*, will arrest attention. The author agrees with Gumplowicz "that the law of inertia applies to social groups just as it applies to human beings and natural objects," and "there is nothing more erroneous than to imagine that there exists in man an innate instinct which constantly impels him on the path of progress." With this the French reader is more likely to be in agreement than is the English. Without entering on the debatable question of what is progress, surely it is the effect of the working of mind upon mind, the "life force" of each member of a social group which impels men to the performance of actions without external compulsion. Durkheim's explanation of the industrial revolution is dismissed as too simple.

The second part draws the main lines of the movement in the latter half of the nineteenth century. The author compares the positions of workers and employers in 1846 and 1896, in many cases figures being given. A very useful collection of facts exemplifies the struggle between the hand-workers and the factories, in which the latter were destined to win in spite of the short-sighted attempts of the State and some individuals to oppose their irresistible superiority. He explains carefully the connotation of *l'industrie à domicile*, and shows the variations in Belgium to have been greater than in England. That women are the greatest enemies of new forms of production and commerce is fairly well established in the last chapter, but many of the statements would not apply to the modern English or American woman. The work shows careful and exact research

throughout. It is well annotated, contains many statistics hitherto neglected, and the bibliography at the end is very full.

AGNES DAWSON

Problems in Railway Regulation. By HENRY S. HAINES. (New York: The Macmillan Company. 1911. Pp. 582.)

It has been so repeatedly stated by advocates of railway nationalisation that nothing save nationalisation can remedy the causes of the periodical controversies which arise between the railways and the public, that many have accepted it as a principle that efficient regulation of privately owned railways by the State is an impossibility. Support is given to this by the many failures in regulation in the past, and the obvious defects in the existing regulation in the United States and our own country. Few seem to realise that the governmental regulation has been wholly spasmodic, and that no guiding principles have ever been adopted. The remedy applied to meet a particular ill has frequently caused, or at any rate has aggravated, some other trouble not previously of any moment. Further, great efforts have been made to keep competition alive and effective. These efforts have eventually proved the failures that they were bound to be. If the efforts directed to keeping competition alive had been directed to the construction of an efficient scheme of regulation, it is not improbable that the present day judgment on the possibilities of regulation would be reversed.

After the many books on railway nationalisation, it is refreshing to find an acknowledged authority on railway matters dealing with the many problems of railway regulation. Mr. Haines leaves the reader in no doubt as to his position. He is a whole-hearted believer in well-regulated private enterprise in railway matters. The regulation, however, whilst protecting the public, must be so framed that it will avoid the danger of discouraging enterprise. Skilful management, new ventures undertaken, risks incurred in experiments must be allowed to have their reward. If the railways are robbed of this, then the prospect is that many, if not most, of the advantages of private enterprise will be lost.

Mr. Haines traces the history of railway regulation in the United States through its various stages. The original Interstate Commerce Act has, he considers, stood the test of time "better than could have been reasonably expected." This, however, has been followed by other and more stringent regulations.

A decision of the Supreme Court in 1897, which brought the

railways under the Anti-Trust Law, deprived them of the right to make uniform rates for competitive traffic. The Safety Appliance Act of 1898 has given the Interstate Commerce Commission control over the construction and maintenance of the rolling stock. The administration of the Erdman Law in the recent railway strike "virtually placed the establishment of the wages scale and the terms of employment at the discretion of the administrative officials of the Federal Government." The Act of 1907 limited the hours of certain employees. Finally the passage of the Commerce Court Act of 1910 has deprived the railway management of the rate-making power. We can only agree with Mr. Haines when he concludes: "The Federal Government now controls, in fact, the management of *our* national railroad system."

The dangers are very evident. The control has no financial responsibility. It is only responsible to public opinion. Past history has often shown us this public opinion roused by an agitation manipulated by selfish interests. Government management, which is not responsible for financial results, is apt to ignore economic principles, and to shape its measures with an eye to the "perpetuation of its political prestige." The difference from the position in France is striking. The French railways are even more stringently regulated than the railways in the United States. Political influence is admitted in that regulation to an extent which is commonly condemned. There is, however, an ultimate safeguard. The State has guaranteed a minimum return on the railway capital. The railways are in consequence debtors to the State. Any action which injures the railways is bound to react on the State finances.

Mr. Haines advocates that the railways should be judged by results. The railways should be under obligation to perform the service of transport with safety, convenience, and promptness. "How that end is attained should be no concern of the government." "Interference in details will surely lead to confusion, with consequent friction and loss of efficiency." The idea seems very admirable, but it would have been helpful if some indication could have been given how the Government are to carry the principles into practice. It does not help matters much to say, "Make the corporations penally responsible for results, its officials also." If there are too many accidents on the railways, it is not possible to fine half the railway corporations, and imprison a large number of the principal officials.

Further, Mr. Haines still has a hankering after competition as a regulator. Is it not rather the case that competition as a

regulator has broken down, and that efficient regulation is only possible if competition is practically abolished?

W. TETLEY STEPHENSON

The Tariff in our Times. By IDA M. TARBELL. (New York : The Macmillan Co. 1911. Pp. 375.)

THE American tariff has long ceased to have any interest for the economist ; if we continue to study it, that is because of the light which it throws upon human nature and politics. There is corruption in all political systems, but usually that corruption is of such a delicate and subtle nature (as, for instance, the sale of honours by the English political parties) that there is room for difference of opinion as to how serious the corruption is—perhaps even as to whether it really *is* corruption after all. And most nations are reticent : they do not wash their dirty linen in public : it is difficult to get at the facts ; one may feel convinced that there is something wrong and yet not be certain precisely what is wrong. But the American Tariff stands out with a superb confession of indecency that almost raises it out of the dirt and fog of political life into an atmosphere of fine drama. We should like a truly great realist to tackle the problem of describing it—a man who would abstain from all moralising and simply tell us in detail exactly what has happened. Miss Tarbell does not quite do this : her writing is indeed admirably restrained ; but it is still clear all through that she is on the side of the angels. The historian of the American Tariff should be above this. The American Tariff is—*jenseits von Gut und Böse*.

For after all the main emotional interest of such a study should lie in an understanding of, a human sympathy with, the framers of those wonderful schedules : and here Miss Tarbell fails. In her writings we meet only two kinds of protectionists—the *naïve enthusiasts* who really believe all they say, and the completely *cynical* who are merely out for the dollars. Now I venture to believe that neither of these men really exists. There can never have been a protectionist leader who believed all that he said : neither, I venture to assert, has there ever been one who was merely out for the dollars. These are the antitheses of melodrama. Behind them there must lie the gradations, the variety, of real life.

Still we are glad to have the book. Within its limits it is quite excellent—a shrewd, unfanatical, unflinching account of all the twists and turns of policy, circumstance, public opinion and in-

dividual interest, which have made the American Tariff what it is. The author has avoided any elaborate discussion of the economic effects of the Tariff—I think wisely. What little she does drop on this subject suggests that she is less well equipped for handling that side of the problem, and, as was said at the beginning of this review, the economic interest of the Tariff is entirely subordinate to its political interest. Miss Tarbell voices very vigorously and sensibly the opinion which she shares with thousands of the best of her compatriots, that the Tariff as it stands is a palpable disgrace and a palpable menace to the State, and that it is “up to” the great republic to clear away this disgrace, to remove this menace.

H. O. MEREDITH.

The Case Against Tariff Reform: A Reply to the Case Against Free Trade, by Archdeacon Cunningham. By E. E. TODD, (London: John Murray. 1911. Pp. lx+156. 2s. 6d. net.)

AFTER reading this book, we are forced to hope that the examination of economic problems by the “case” method will not spread. The author seems to us to have covered some ground both shrewdly and satisfactorily, especially in those sections in which he examines the reason for the excess of imports over exports in our foreign trade, the real significance of the export of capital, and the recent experiences of Continental countries in tariff bargaining. He shows, too, that the prosperity of any trade, *e.g.*, shipping, cannot be accurately measured by reference to the trade of a particular year or with particular places, and, further, that the comparatively swifter expansion of some branches of German or American trade does not of itself prove that England is losing relatively in the long run, or absolutely for the period in question. But we could wish that the author had been either more sparing or more cautious in his use of history and in his pronouncements on imperial policy.

With reference to the Corn Laws, he remarks that after 1846, “except in 1847, the price fell” (p. 89). But the fuller facts seem to be these. If we take five-year periods, the average price of wheat per quarter was, 1841-5, £2 5s. 6d.; 1846-51, £2 13s. 4d.; 1851-5, £2 16s. It is only with reference to the single year 1846, a year of famine, that we can say “except in 1847 the price fell.” The author, indeed, admits that the decline thus measured was relatively small, and he attributes the smallness to the in-

fluence of the Californian gold discoveries in raising prices. But if the question is to be discussed at all, more facts ought to be given. According to Tooke, the home harvests were very bad, and the foreign harvests generally good from 1847 to 1852: in this period wheat was largely imported from other countries, and but for free imports the rise of price would have been much greater. Why, then, were prices from 1853 to 1855 still higher? Because in 1853 and 1855 harvests were bad at home and abroad, and in 1854, when our crop was good, the foreign harvest failed and corn was actually exported from England. In 1854-5, in addition, the Crimean war added to the rise, by cutting off Russian supplies and raising freights. When these peculiar circumstances had passed away, and when the Californian discoveries had worked themselves out, the price fell, and the fall was intensified by the cheapening of transport and the opening up of Transatlantic markets. We have dwelt on this point at some length, because it does seem a pity that these questions of history should be studied on both sides from a partisan standpoint. The truth is hard enough to ascertain even after an impartial investigation. Again, we are given a quotation from Huskisson to the effect that "the prosperity of the Colonies is cramped and hindered by the old system of exclusion or monopoly" (p. 13). Would it not be fairer to mention also that Huskisson was an ardent advocate of Imperial Preference, and in his speech of March 25th, 1825, resisted the reduction of the duty on Baltic timber, arguing that concessions to this trade "rival, as with respect to Canada it might be called," would diminish the protection afforded to Canadian timber, "which, considering that it grew in one of our own Colonies and was transported in our own ships, was a most valuable trade to Great Britain" (*Speeches*, Vol. II., p. 362).

Mr. Todd's arguments against closer relations with the Dominions seem to be two. First, the British Empire is not ripe for a common fiscal policy because the economic stage attained by each constituent State is widely divergent" (p. 6). Secondly, our own bargaining strength is sufficiently secured by the most-favoured-nation treatment, which "is the automatic development of our own modern fiscal policy" (p. 33). What, then, we would ask, of the recently rejected Reciprocity Treaty between Canada and the States? The States do not extend most-favoured-nation treatment automatically; and, therefore, if this proposal had been carried, for the first time in history Dominion products would have entered the States on better terms than similar products from the Mother Country. Moreover, it is just because there is between

Great Britain and her Dominions a variety of development, that imperial union, at once political and economic, is attractive to serious students. Such a union would for that reason be more fruitful of harmony within and stronger in bargaining power without.

We refer in conclusion to a few passages, which seem to us overstated or inaccurate, and we leave it to readers to form their own opinion :—the correction of German export values by reference to domestic prices in Germany (p. 69) ; the judgment that the protective system is a principal cause of the relative stagnation of the French population (p. 71) ; the analysis of the incidence of a tax on commodities, for which this country affords the only important market (p. 96) ; the reference to the tendency of the Cartel "to crush out the smaller concerns" (p. 97) ; the explanation of the multiplicity of the old Customs list (p. 100) ; and the comparison of the high rate of profits on *selected* British investments with the average rate on *all* British investments in South America (p. 108).

On pp. 128 and 129 there are some cursory and inadequate remarks on Adam Smith and Employment, which seem to be intended to dispose of the sustained and brilliant argument propounded by Professor J. S. Nicholson in his *Project of Empire*. This book and Dr. Marshall's *Memorandum on Fiscal Policy* present two different standpoints, but they are both written in a very different spirit from the work we have just reviewed.

C. R. FAY

The Principles of Insurance. By W. F. GEPHART. (New York : Macmillan Co. 1911. Pp. 304.)

THIS book scarcely deserves the high-sounding title given to it by its author, for it is confined almost exclusively to one form of insurance, and makes no mention either of fire or marine insurance. Its length is 304 pages, of which 255 are given to life insurance, and the balance to a rough sketch of employer's liability, sickness, accidents, and old-age pensions. It is really a treatise on life insurance, written not for the expert, but for the casual student, and the only man who will find it worth his while to read it is the man who wants a general understanding of actuarial principles. Within its own sphere it is a useful and readable book, and puts the facts of life insurance as well as they can be put in a compass of less than 400 pages. It can scarcely be claimed that the intending insurer will find his choice of a company simplified by

the reading of it, but life insurance nowadays touches general business at so many different points that every business man and every student of practical economics is very much better equipped for his work after he has obtained a grip of its principles. The book follows the obvious lines, dealing first with the historical development and the rough theory, then with practical mortality tables, classification of companies, premiums, investments, reserves, dividends, &c. None of this matter is original or revolutionary, though it is all sound and instructive. The part which one would have liked to see developed at greater length is the purely American chapter on insurance and the State. As a man well versed in the practice of American insurance, Mr. Gephart understands thoroughly those curious State regulations which to the Englishman are so inexpressibly puzzling. The jealousy of State and State, the anxiety of the Legislatures to protect their own assured, and still more their own insurers, have produced in fire, and presumably in life insurance, a tangle of legislation which very few people outside American insurance circles can hope to understand. In some States, for example, a broker who places a fire risk outside the border must file an affidavit declaring that the home resources have all been exhausted before the outside market is tapped. How such regulations can be enforced even partially is far from clear, and we should like to have Mr. Gephart's chapter on this subject worked out on much more comprehensive lines. The conclusion at which he arrives is as follows:—

Notwithstanding the many valid objections against State regulation of the insurance business, it is not probable that we are soon to have federal legislation. This is not to be explained by the difficulty of securing an amendment to the Constitution, nor on the ground that the Supreme Court is not likely to reverse itself. It is primarily due to the fact that the States have no desire to give up insurance regulation.

To the Englishman this unwillingness to federalise insurance legislation appears as rather a stupid form of protection, and there is no doubt that business in America is seriously handicapped by it. Perhaps Mr. Gephart will follow up this work by another on State and Federal supervision of insurance, and a third, which might be extremely interesting, on fire insurance in the United States.

D. E. W. GIBB

England's Recent Progress. By THOMAS A. WELTON. (London : Chapman and Hall. 1911. Cr. 8vo. Pp. 742.)

IN this bulky volume Mr. Welton presents the results of an enormous amount of painstaking calculation regarding the migration from or to various groups of districts in England and Wales at different ages, and mortality, marriage, &c., in the twenty years from 1881 to 1901. As a student of population statistics, Mr. Welton has been known for a long period, and has done useful work in grouping and arranging the results of the census enumerations of the nineteenth century. In the present volume he endeavours to correlate the records of births, marriages, and deaths at different ages, with the records of the censuses. These records are well known to be subject to various errors, and the portions of the General Report on the 1901 Census of England and Wales in which the question of ages is discussed contain many illuminating remarks, and important warnings to those who would make use of the statistical material presented. It would appear that Mr. Welton prefers to rely on his own judgment in such matters as the adjustment of the crude census figures for erroneous statements of age, and the estimation of the proportions in which recorded deaths between various age-limits relate to those included in the age-groups of the Census, rather than utilise the adjustments shown by the tables which are included in the Census Reports. The Registrar-General, in dealing with the differences between the enumerated population at various ages and the calculated survivors from those enumerated at previous censuses, hesitates to estimate how far the differences represent physical migration, how far they represent unadjusted balances arising from inconsistent records of age of the same person at different censuses. Mr. Welton is bolder, and has, at great length, set out the balances as representing migration, not merely in the figures for the country as a whole, as to which there are not unimportant differences between his results and those presented in the Census Reports, but also in the figures for the principal towns, and for various groups of districts presenting particular characteristics. While many of the results secured have an air of great probability, the possibilities of deviations between actual movements and the assumptions which have served as the basis of the calculations, and deviations of great importance to the argument, cannot be ignored. For the subdivisions of the country, the life-tables and deductions from them are not available, and if anything is to be done with the figures,

it is necessary to assume a basis, as rational as possible, for adjustments of the nature alluded to above. But the lack of agreement in the results for the country as a whole between the calculations presented in the Census Report, and the calculations made on Mr. Welton's estimated basis of adjustment of the figures, compels one to regard the mass of figures in the volume as speculative to an extent which considerably qualifies their value.

It may, perhaps, be as well to give a couple of illustrations to justify the above remarks.

At p. 5 of Mr. Welton's volume we find a table in which the deaths of females at ages 15-20 at the end of the decennium are put at 60,035 in 1881-90 and 54,194 in 1891-1900. At p. 209 of the General Report on the 1901 Census of England and Wales, the deaths of females at ages 5-10 at the beginning of the intercensal period are estimated at 55,687 in 1881-91 and 49,061 in 1891-1901. At other ages the differences are less marked, and in some cases negligible for the purposes in hand. It may be suggested, however, that the selection of rules of adjustment which would agree with the results of the calculated life-tables might have given greater confidence in the validity of the results where life-tables are not available, though the irregularities of the figures for relatively small areas make the general application of any uniform rules for adjusting the recorded figures more than hazardous.

A. W. FLUX

The Soya Bean of Manchuria. By NORMAN SHAW. (Published on behalf of the Chinese Imperial Maritime Customs. Shanghai and London: P. S. King. 1911. Pp. 32. 3s. net.)

THE present revolution in China, and the effect which it is likely to produce on economic developments in the Far East, give an exceptional interest to the above pamphlet, which has recently been published by the Statistical Department of the Chinese Customs Service. The question of China's trade balance has attracted the attention of all who are interested in Far Eastern affairs, and there has been a general feeling that an expansion of Chinese exports would react favourably upon her general economic standing. In recent years there has been a tendency for the imports of foreign manufactured goods to exceed the native exports by a very heavy percentage, and attention has

been directed towards stimulating the production of those raw products which can find a demand in European and American markets. In past years tea and silk have held the first place in the list of China's contributions to the world markets, and we are now reminded that the soya bean has taken "at a bound a position equal to that of tea in the list of exports, and, with the addition of beancake, even challenged the position of silk at the top of the list." Mr. Shaw has dealt with his subject in a very practical and interesting way, giving full details of the bean, its history, production, agricultural interest, and commercial development. It has found its most favourable home in Manchuria, though parts of North America, the British Colonies, Japan, and the Yangtze Valley all produce the bean to some extent. The soya bean and its derivatives, *soy*, or bean sauce, bean-oil, and beancake, provide the staple food for a numerous agricultural population, a fattening compound for animals, an illuminant, and a valuable fertiliser, under all of which heads it is gradually being turned to new and broader uses.

In the period following the Russo-Japanese war the fertile agricultural districts of Manchuria suffered a temporary eclipse, but they are gradually recovering from the war-strain, and the development of the bean trade, assisted by improved railway facilities in Manchuria, gives promise of a period of exceptional prosperity to Northern China. It is, however, in its far-reaching effects on the trade-expansion of the Chinese Empire, in the prosperity which it promises to numerous buyers of foreign cotton-stuffs, and in its general influence on mercantile exchanges, that the sudden and remarkable development of the soya bean will find its real interest for those who are watching the trend of Asiatic affairs in their relation to the economic world.

ARCHIBALD ROSE

Il banco di san Giorgio. By EMILIO MARENGO, CAMILLO MANFRONI, and GIUSEPPE PESSAGNO. (Genoa: A. Donath. 1911. Pp. 556.)

THIS is a monumental history of the Genoese bank of S. George during the four centuries of its life. The three authors are moved by almost too great adulation for "the halo with which tradition has surrounded the institution"; but the work was published at the time of the celebrations over the jubilee of Italian unity, and their enthusiasm for one of the most remarkable products of its local history is appropriate and natural.

The actual story has been told before, though the printed accounts have in this work been supplemented by fresh material from the Genoese State archives. The bank was definitively founded at the beginning of the fifteenth century, on the basis of the existing national debt, for which a company of directors undertook responsibility. In the course of years this company financed fresh loans to the State, whose indebtedness to it was nearly fifty million lire from the middle of the sixteenth to the end of the eighteenth century. In return for this, and as security for interest—after 1539 there was no thought of recovering the capital thus lent—the Government pledged to it successively the product of specified taxes, and the Republic's foreign possessions, the whole of which it held at one period. Gradually individual traders began to deposit their money with the company. After 1586 it assumed almost all the functions of a modern bank, giving credit and discounting bills for private persons, and transferring sums due to its different customers. It also acted as a bank of circulation, for the "*biglietti di cartulario*," which it issued from the fifteenth century onward practically did the work of bank notes. Unlike most early banks, it always maintained its solvency, except for one brief period, until the French invasion in 1797 swept it away, along with all the old banks of Northern Italy. Throughout its history, the directors maintained a tradition of uprightness and of business-like methods. As early as the fifteenth century its accounts were kept on a system of bookkeeping by double entry, and by its help the commerce of the East flowed to France, Spain, and Switzerland, with security and comparative despatch.

The history of the bank is, however, really more interesting from the political and personal than from the economic point of view, and we may be grateful to the authors for the lavish supply of pictures, contemporary and otherwise, with which they illustrate this. The Company of S. George was the one stable institution amid the perpetual faction fights of the Republic—the one point on which Genoese pride could concentrate. Belonging to a commercial people, Genoese patriots expressed their pride and confidence by bequeathing to the Company funds which might help to form a sinking fund to pay off the national debt which it controlled, and to diminish the taxes which it farmed. Christopher Columbus was one of those who left directions for such disposal of his money after his death. The bank responded by contributing to public works, building aqueducts, financing the navy, and by repeatedly saving

the State from bankruptcy. Finally, it became a State within the State, with far greater strength and a far wider sphere of administration than the nominal political authority, which gave itself over contentedly to Milan, France, and Austria by turns. The company tried conscientiously to rise to the administrative duties thrust upon it in particularly difficult circumstances. In the most prudent manner it would investigate the appropriate form of constitution when it "took over" one of the State colonies; it endeavoured to select good governors, and to encourage trade by all possible means. But its connection with these dependencies involved it in all the turmoil of fifteenth- and sixteenth-century seafaring life in the Mediterranean, where the attacks of Turks and corsairs upset the best-laid trading schemes. Like other chartered trading companies, the bank tried to rule its possessions too much from the shopkeeping point of view, with too little provision for defence, and, like its successors, failed to combine political and economic interests. It was thus rather a relief to the Company of S. George, and to the State, the nominal owner, when the last of the Genoese possessions in the East were absorbed by the Turks. After this loss, the company continued on its staid and prosperous career, helped by the Free Trade policy which the Republic began in 1595.

The experience of the bank foreshadowed many later inventions, economic and political, and the authors have done a pious work for their country by producing this sumptuous record. It would be interesting if later historians would research into the social influence exercised by the bank among different classes in the city of Genoa, and compare its importance with the very marked influence of the Venetian bankers at the same period.

C. V. BUTLER

La Moneta nei suoi rapporti quantitativi. By DOMENICO BERARDI. (Turin: Biblioteca di scienze sociali, Volume lxi. Fratelli Bocca. 1912. Pp. 258.)

PROFESSOR BERARDI has written a very clear, though not particularly original, monograph, historical and explanatory, on the subject of money. He gives some space to the functions of money, to the mercantile system, and to the balance of exchange. He concludes that the value of money conforms to ordinary economic laws. Its quantity at any given moment naturally affects prices and values, but "this factor of quantity is not peculiar to money." "The law of value is uniform—from the

point of view of production and from that of consumption—for money as for every other product.”

C. V. BUTLER

Statistikens Själfständighets-förklaring i Sverige. By THOR ANDERSSON. (Stockholm: Frölén & Co. Pp. 80.)
Statistiska Kommitténs Betänkande. (Stockholm: P. A. Norstedt & Söner.) *Handelsstatistik.* (1908. Cr. 8vo. Pp 61.) *Jordbruksstatistik.* (1908. Cr. 8vo. Pp. 144.)
Sveriges Officiella Statistik och dess Allmänna Organisation. (1910. Cr. 8vo. Pp. 460.)

MR. ANDERSSON, in the brochure which he entitles *The Declaration of Independence of Statistics in Sweden*, offers first a severe criticism of the methods of those who have represented and guided Swedish statistics. He declares that, from Wargentin to Charlier, there has been totally lacking any contribution from Swedish writers capable of standing modern scientific criticism. We need not, perhaps, enter into the personal questions with which he occupies himself, but content ourselves with noting the features which serve as justification for his title. Briefly, they are that, after a proposal for the establishment of professorships in statistics at the universities of Upsala and Lund had been rejected by the Swedish Parliament in three successive sessions, it was accepted, so far as concerns Upsala, in the next following session, 1909. Statistics have thus secured an independent status as a university study. On the practical side, it is also pointed out that in the same year in which this important step was taken, an industrial inquiry was organised, in which the modern card system was adopted for the first time on an extensive scale, namely, that into stone-working.

A brief sketch of the development of modern statistical methods, principally in Germany and England, ending with references to their application in biometrics and eugenics, concludes the pamphlet, the main burden of which is a lament over the deficiencies of the author's native country in regard to this important branch of science.

Whatever may have been the past defects in the organisation of the official statistics of Sweden, the labours of the Royal Commission appointed in 1905, of which Dr. Heckscher is secretary, have been directed towards the formation of a plan for their improvement in the future, and the reports of the Commission present, in addition to an historical account of the growth of each

principal department of the official statistics, a plan for the future collection, preparation, and publication of statistics of all kinds. Separate reports have been issued relating to the statistics of trade and of agriculture, and the remaining branches are severally dealt with in the report on the general organisation of official statistics in Sweden. Information has been secured from statistical authorities in the leading countries of the world as to the methods practised in the several countries, and this information is summarised in the report. The summary is very highly condensed, but affords, nevertheless, a useful conspectus of the subject, even though the reader approaching these parts of the reports without previous knowledge might fail to secure entirely clear and accurate ideas from their perusal.

The very numerous details of the proposals for reform cannot be profitably entered upon in this place, but it will be of interest to note that the centralisation of all the official statistics under one authority is the general purpose of the proposals, apart from the specific changes in methods of collecting the material which are suggested for adoption. It is argued that only in an office devoted to statistical work can the expert knowledge required be secured. Where the preparation of statistical reports is a subordinate part of work principally administrative, it is regarded as unlikely that statistical efficiency can be attained. While an immediate complete centralisation is not proposed, very important steps in that direction are recommended, and the ultimate aim would appear to be such complete centralisation. It must be admitted that there is much force in the argument referred to, particularly in cases in which the statistical work is not sufficiently extensive or important to justify the employment of experts in direct association with each section of administrative work. Where, however, the volume of the statistical work in individual sections of administrative work is large, the force of the argument would appear to be much lessened, so that the conclusion as to the relative gains and losses to be secured by centralisation will vary from country to country.

The prospect of the removal of some important defects in certain departments of the official statistics of Sweden, and especially of a speedier publication of results, is one which will be welcome to statisticians elsewhere, and the arousing of public interest in that country in the matter is all to the good. Incidentally, a convenient work of reference as to the actual methods followed in Sweden in the past, both distant and recent, and a

critical examination into those methods, is placed at the disposal of all interested in international statistics.

A. W. FLUX

Die Besteuerung nach dem Überfluss (nach der Ersparnismöglichkeit). By H. WEISSENBORN, Mayor of Halberstadt. (Leipzig : Duncker u. Humblot. 1911. Pp. 55. 1.20 mk.)

HERR WEISSENBORN'S pamphlet is written with reference to the "organic reorganisation" of the Prussian system of direct taxation, which has been foreshadowed by the Finance Act of May, 1909. The questions which he discusses in this connection are, however, of general interest.

The problem of his pamphlet is : in what direction does the income-tax require further development in order to realise more fully the faculty-principle of taxation, which is considered to be its basis. A tax is strictly according to faculty, when in all cases the urgency of the needs which are left unsatisfied on account of the payment of the tax is equal. Therefore both the amount of income and the nature of the corresponding expenditure ought to be considered. A proportional income-tax could claim to be based on the faculty-principle only if we assumed that to every additional sum of income there corresponded an additional expenditure of equal urgency with the previous ones. A progressive income-tax, uniform for equal incomes, is based on the assumption that the urgency of additional needs increases less rapidly than the income, and that to equal incomes correspond equal needs.¹ But even assuming that for the recipients of equal incomes the urgency of the different kinds of needs, and hence of expenditure, is equal, still their quantities may differ ; in other words : for equal incomes the same things being considered necessities, comforts, or luxuries, the quantities of each which are required need not necessarily be equal. These variations in quantities are chiefly due to differences in the number of persons dependent on the given income. For this reason reductions in taxation are being made in cases where the given income serves for the maintenance of more than the average normal number of persons ; a differentiation is thus made according to needs, within the same category of income. The author proposes to extend this principle by imposing an additional tax on incomes with a less than average number of persons dependent on them.

Herr Weissenborn's ideas are as simple as they are reasonable.

¹ This applies, of course, also to a proportional income tax.

The one fault we can find with his pamphlet is that instead of setting forth his proposals as the direct outcome of the excellent discussion in Chapter I., he prefixes a lengthy digression on a different scheme (that of Dr. Bendixen).¹ This procedure is liable to hide from the less careful reader how small a departure and at the same time how logical an extension he advocates. We have also certain doubts whether it is necessary to label a new application of an accepted principle with a new name (taxation of surplus); whether it is worth constituting frontier-rectifications into a new province.

However, we wish once more to lay emphasis on the excellence of Herr Weissenborn's discussion of the principles which underlie the different forms and developments of the income-tax.

L. B. NAYMER

¹ A mark of the digression appears even in the title of the pamphlet; Herr Weissenborn calls the tax which he proposes a tax according to the *power* of saving, in contradistinction to Dr. Bendixen's tax which would, as Herr Weissenborn shows in his pamphlet, fall on savings without reaching the "surplus" of the spendthrift.

NOTES AND MEMORANDA

THE ECONOMIC LEGISLATION OF THE YEAR 1911.

Notwithstanding the large amount of time spent by Parliament on the National Insurance Act, the number of public general Acts, fifty-eight, was quite up to the average. As so much publicity has been given to the provisions of the National Insurance Act, and as excellent summaries may now be easily obtained, the Act has not been dealt with in this note.

It is a little difficult to classify many of the Acts as they affect different interests, since the scope of some of them is very wide. The following classification has been adopted:—I. *Financial*; II. *Commercial*; III. *Industrial*; IV. *Agricultural*; V. *Shipping*; VI. *Social Reform*; VII. *Public Services*.

I. *Financial*.

It is satisfactory to note that the revenue for the year 1910–11 was £203,851,000, and the expenditure £171,996,000, giving a realised surplus of £31,855,000. By the Revenue Act of the year, it was enacted that the two years 1909–11 should for the purpose of the Old Sinking Fund be treated as one year. After deducting the deficit in 1909–10 of £26,248,000, the surplus remaining was £5,607,000. £1,500,000 of this amount was expended on sanatoria for consumptives. The revenue for the year 1911–12 was estimated at £181,716,000, and the expenditure, which includes the item of £50,000 for the cost of getting ready for the National Insurance Act, at £181,284,000. £45,000 of the estimated surplus is to be spent in the remission of the cocoa taxes and £50,000 in the modification of liquor licence duties.

By the *Appropriation Act* (c. 15) the Treasury is authorised to raise the necessary funds for the supplies granted for the services of the year ending March 31st, 1912. The total of the supply grant and appropriation in aid is 156 millions. Of this amount 46 millions are to be spent on the Navy, being an increase of

4½ millions, and 31 millions on the Army. Other items of interest are:—Education, 19 millions; old-age pensions, £12,415,000; international exhibitions £35,700; and salaries of members of Parliament, £252,000.

The *Revenue Act* (c. 2) amends, among other items of finance, the law relating to Inland Revenue, including duties on Land Values, Excise, and Income Tax.

The annual value of any premises for the purpose of excise licence is declared by Section 8 to be '(in England and Scotland): (a) the inhabited house duty value if there is such a duty applicable; and (b) the income tax value in cases where there is no inhabited house duty available; and (c) if there is neither of the foregoing available, the annual value is to be determined by the Commissioners of Customs and Excise. In Ireland the annual value is to be determined by the Commissioners of Customs and Excise. The Commissioners must have regard to any decrease in the annual value resulting from any increase in the licence duty under the provisions of the principal Act (43 and 44 Vic., c. 20).

Section 11 gives power to the Special Commissioners, in cases where they are unable to obtain from the husband a satisfactory return of the wife's income, to require the wife to make a return of her income and to relieve her husband of this obligation.

Part V. of the same Act deals with provisions as to payments of land value and local taxation duties to Local Authorities. Section 91 of the Finance Act (1909-10), 1910, provided for the payment of half the proceeds of the duties on land values for the benefit of local authorities; by Section 15 of the present Act this provision is suspended until Parliament otherwise determines, but not beyond March 31st, 1914.

Section 2 of the *Moneylenders Act* (c. 58) enacts that no person shall be registered as a moneylender under any name including the word "bank," or under any name implying that he carries on a banking business; and where any moneylender is registered under such name, the name shall be removed from the register and a notification to that effect sent to him. If a moneylender issues or publishes, or causes to be issued or published, any circular, notice, advertisement, letter, account, or statement of any kind which might reasonably be held to imply that he carries on a banking business, he will be liable on summary conviction to the penalties stated in Section 2 of the *Moneylenders Act* of 1900.

By the *Finance Act* (c. 48) effect is given to the Budget proposals for the current financial year.

Part I. relates to Customs and Excise. By Section 1 the duty on tea is continued at fivepence per pound. The duty of twopence per pound levied since 1879 on manufactured cocoa or chocolate is now taken off, but the duty imposed by the Finance Act of 1901 (Section 7) is untouched. Drawback is to be allowed on the exportation or shipment for use as ships' stores of preparations of cocoa in respect of the quantity of cocoa or cocoa butter, or cocoa husks and shells, which have been used in the preparation of the goods.

Section 5 provides for the minimum duty on licensed premises not to apply in the case of any premises situated in the thinly populated and outlying part of an urban area. In these cases the premises will be deemed to be situated in an area not urban; they are then subject to an abatement of duty. They further have to conform to the provisions for the earlier closing of premises not situated in a city or town.

Section 9 allows manufacturing or wholesale chemists and druggists to obtain licences for selling rectified spirit of not less than forty-three degrees above proof for medical and scientific purposes to medical practitioners and registered chemists and others for the reduced duty of ten pounds.

By Section 11 motor-cars used by any local authority for fire brigade purposes are exempt from the licence duty on motor-cars, and by Section 12 local authorities are entitled to an allowance or repayment on the duty of the spirit used in fire-engines or motor-cars used for fire brigade purposes.

Part II. relates to Stamp Duties. The Stamp Duty on marketable securities transferable by delivery (not being Colonial Government securities) is reduced to threepence for every ten pounds, if the money is to be paid off in a year, and to sixpence if the money is to be paid off within three years from the date on which duty is payable.

Part III. deals with income tax and inhabited house duty. The income tax continues at one shilling and twopence and the super-tax at sixpence. Premises in the hands of caretakers are not to be deprived of the benefit of exemption from inhabited house duty by reason of the fact that the husband or wife of a caretaker, or other member of the family, or caretaker's servant dwells in the same house or tenement.

II. Commercial.

The *Merchandise Marks Act* (c. 31). makes a welcome addition to the *Merchandise Marks Act* of 1887. The old Act gives the

Customs officials the right under Section 16 to seize goods coming into this country bearing the name or trade-mark of some manufacturer, dealer, or trader in the United Kingdom; but the manufacturer or trader in this country whose trade-mark had been infringed had no right to the information possessed by the Customs officials as to the name of the importer of the goods, or his agent, or the name of the consignor or consignee. By this Act information may be communicated by the Customs officials to any person whose name or trade-mark is alleged to have been used or infringed.

III. *Industrial.*

The legislation affecting cotton cloth factories is extended by the *Factory and Workshop (Cotton Cloth Factories) Act* (c. 21). A Committee having been appointed by the Home Secretary to inquire into the question of humidity and ventilation in cotton cloth factories, power is given by this Act for the making of regulations for the purpose of giving effect to the recommendations of this Committee.

The *Coal Mines Act* (c. 50) is a consolidating and amending Act, and it is the outcome largely of the recommendations made by the Royal Commission appointed in 1906 to inquire into the conditions under which coal-mining was being carried on. There has been no Act of such great importance to the mining industry since the *Coal Mines Act*, 1887. The Act consists of eight parts, dealing respectively with Management, Safety, Health, Accidents, Regulations, Employment, Inspection, and Supplemental. It comprises 127 sections and four schedules.

Although the Act is chiefly a consolidating measure, there are many new and important provisions. After January 1st, 1913, no manager of a mine is, without the approval of the inspector, to be the manager of any other mine if the number of persons employed in the two mines exceeds one thousand, or if the shafts or adits of both mines do not lie within a circle having a radius of two miles. A manager must be at least twenty-five years of age, and must hold a first-class certificate or a second-class certificate. These certificates for competency must be obtained from "The Board for Mining Examinations" to be constituted by the Secretary of State, consisting of six representatives of owners or agents of mines or managers of mines and mining engineers, six representatives of workmen employed in mines, the chief inspector and two divisional inspectors of mines, and two persons eminent in mining and scientific knowledge. The Board is to hold examinations, make rules for the conduct of examinations, and determine

the qualifications of applicants for certificates of competency, providing amongst other things that conditions for obtaining second-class certificates shall be suitable for practical working miners. After January 1st, 1913, no one is to be appointed as fireman, examiner, or deputy unless he holds a first- or second-class certificate, is at least twenty-five years of age, and has had at least five years' practical underground experience, has obtained a certificate of ability to make tests for inflammable gas, and to measure an air current, and further that his hearing and eyesight are good.

Under the provisions as to safety, winding ropes are to be renewed every three and a half years and are to be re-capped every six months. No spliced rope is to be used at all. Provision is made for a greatly improved system of speed controllers and detaching hooks and suitable brakes to protect the miner from the peril of over-winding. It is forbidden to raise material and tools at the same time as men are being wound up and down the pit.

Part III. deals with provisions as to health. Where a majority of workmen represent to the owner of the mine that they desire that accommodation and facilities for taking baths and drying clothes should be provided at the mine, and are prepared to pay half the cost, the owners are bound to provide such accommodation, but only if the estimated total cost of maintenance does not exceed threepence per week for each workman contributing.

Part VI. deals with the employment of boys, girls, and women. No boy under the age of fourteen years, and no girl or woman of any age is to be employed in a mine below ground. With respect to boys, girls, or women employed above ground, in connection with a mine, no boy or girl under the age of thirteen shall be employed, unless lawfully so employed before the passing of this Act. No boy or girl of thirteen and no woman is to be employed for more than fifty-four hours per week or more than ten hours per day. Night work, Sunday work, and work after two o'clock on Saturday afternoon, is forbidden. There are special provisions for meal hours and against the carrying or moving of heavy weights.

Special regulations are made in the third schedule for the better treatment of pit ponies.

The Act comes into operation on July 1st, 1912.

The danger arising from the use of flock made from dirty rags is to be removed by the *Rag Flock Act* (c. 52). This Act prohibits the sale of flock manufactured from rags or the use of flock for the purpose of making any article of upholstery, cushions,

or bedding, unless the flock conforms to a standard of cleanliness prescribed by regulations made by the Local Government Board. Persons having in their possession for sale, or selling, or using such flock for the purposes above mentioned, are liable to a penalty on the first offence of ten pounds and of fifty pounds on a second offence. If, in case the person proceeded against can prove that the flock has been purchased from a person resident in the United Kingdom under a warranty that it complied with the prescribed standard of cleanliness, and that the purchaser took reasonable steps to ascertain, and did in fact believe in the accuracy of the statement in the warranty, then the person who gave the warranty is alone liable. The Act is to be administered by the local sanitary authorities, and it comes into operation on July 1st, 1912.

The provisions of the *Shops Act* (c. 54) are of great and far-reaching interest. The question of the length of hours of labour in shops has been continually before Parliament since 1886. The last important measure of reform was the Act of 1904, but this was permissive only, and traders desiring to take advantage of its benefits had to show a *prima facie* case before the local authority could move.

The present Act deals not only with the early closing of shops, but with the general hours of employment and with meal-times. Every shop, with the undermentioned exceptions, must be closed on one week-day a week at not later than one o'clock. The trades and businesses exempted from the provisions of the Act as to the weekly half-holiday are :—the sale by retail of intoxicating liquors; the sale of motor, cycle, and air-craft supplies and accessories to travellers; newspapers and periodicals; meat, fish, milk, cream, bread, confectionery, fruit, vegetables, flowers, and other articles of a perishable nature; tobacco and smokers' requisites; medicines and medical and surgical appliances; the sale of refreshments, including the business carried on at a railway refreshment room; the business carried on at a railway bookstall on or adjoining a railway platform; retail trade carried on at an exhibition or show, if the local authority certify that such retail trade is subsidiary or ancillary only to the main purpose of the exhibition or show.

The Act does not apply to any fair lawfully held, or any bazaar or sale of work for charitable purposes from which no private profit is derived.

In the cases of shops in which several trades or businesses are carried on, and when any of these trades would be exempt from the obligation to close on a weekly half-holiday if they were

separate businesses, the exemption is to apply to the particular department under conditions to be prescribed.

The local authority may require the occupier to determine which of the several trades carried on in the one shop is his principal trade, and for the purpose of ascertaining the wishes of the majorities when obtaining votes for or against any proposed closing order the local authorities will deem the trade stated by the occupier to be his only trade.

Local authorities are given power to fix a certain day as the early closing day, and they may fix different days for different classes of shops; or different days for different periods of the year; provided that:—(1) where the day fixed is a day other than Saturday, the order must provide for enabling Saturday to be substituted for such other day; and (2) where the day fixed is Saturday, the order must provide for enabling some other day specified in the order to be substituted for Saturday.

Until such an order is made the occupier may specify in a notice affixed in the shop the day chosen for the early closing, but he must not change the day oftener than once in any period of three months.

In case the shopkeepers of any particular class in a sufficiently large area desire exemption from the half-day closing, or desire to fix the closing hour at an hour not later than two, if the local authority is satisfied that a majority desire exemption, an order may be made exempting that class from the provisions either wholly or in part.

Special provisions are made for the seasonal trade in shops at holiday resorts. The local authority may suspend for periods aggregating four months the obligation to close on the weekly half-holiday.

• A shopkeeper may continue to serve customers after the time laid down for closing, provided he can prove that the customer was in the shop before the time when the shop was required to be closed. Articles may be supplied to customers after specified hours if required in case of illness or if required as necessary stores "for a ship on arrival or immediately before departure.

It is made illegal to trade elsewhere than in shops in any class of business prescribed by order only to be carried on during certain times, but this is not to prevent barbers attending customers at their homes, the holding of an auction sale of private effects in private houses, or the sale of newspapers.

Special provision is made for fixing the hours of employment and meal-times of assistants (other than the members of the

occupier's family). On at least one week-day in each week a shop assistant must not be employed about the business of a shop after half-past one in the afternoon. This provision will not apply to the week preceding a Bank Holiday if the shop assistant is not employed on the Bank Holiday. A notice must be fixed in the shop by the occupier stating the days in the week on which his assistants are not employed after half-past one, and different days may be fixed for different assistants. Occupiers of shops in holiday resorts, where the usual weekly closing order is suspended, must satisfy the local authority and notify by notices in their shops that they give to each of their assistants a holiday on full pay of not less than two weeks a year. Very definite provision is made for securing meal hours for the assistants. No person must be employed for more than six hours without an interval of at least twenty minutes being allowed, and where the hours of employment include the hours from 11.30 a.m. to 2.30 p.m., an interval of not less than three-quarters of an hour must be allowed between these hours, and where the hours of employment include the hours from 4 p.m. to 7 p.m., an interval of not less than half an hour must be allowed. If dinner is not taken on the premises an hour is to be allowed.

The Act is to come into operation on May 1st, 1912.

IV. *Agricultural.*

The *Poultry Act* (c. 11) extends the *Diseases of Animals Act*, 1894, by enabling orders to be made for protecting live poultry from unnecessary suffering while being conveyed by land or water, and in connection with their exposure for sale and their disposal after sale, and for requiring the cleansing and disinfection of receptacles or vehicles used for the conveyance of live poultry. Power is given to inspectors to examine poultry and enter premises in order to administer the provisions of this Act.

By the *Protection of Animals Act* (c. 27) certain Acts relating to animals and to the work of knackers are consolidated, amended and extended. The offence of cruelty is defined very fully. The regulations and restrictions on the trade or business of a knacker are strengthened. A constable is to have the right to enter a knacker's yard at any hour when business is apparently being carried on in order to see if the regulations are being complied with. A licensed horse-slaughterer may not carry on the business of a horse-dealer.

An Act of the greatest importance to the agricultural interest in Scotland is the *Small Landholders (Scotland) Act* (c. 49). It is

an Act to encourage the formation of small agricultural holdings in Scotland, and to amend the law relating to the tenure of such holdings (including crofters' holdings); to establish a Board of Agriculture for Scotland; and for other purposes connected therewith. It is hoped by this Act that more of the agricultural population may be induced to remain in Scotland. In several counties the population is less now than it was in 1801. This has been attributed to the unsatisfactory condition of the land question and to the development of deer forests. The Crofters' Acts are to be extended throughout Scotland to yearly agricultural tenants. A Scottish Land Court is to be established to consist of not more than five persons, one of whom must speak Gaelic. A Board of Agriculture for Scotland, consisting of three persons, is appointed and charged with the general duty of promoting the interests of agriculture, forestry, and other rural industries in Scotland, and in connection with this duty it is to collect statistics, make inquiries, promote and develop instruction, agricultural organisation and co-operation. Sums to the amount of £200,000 are to be placed annually at the disposal of the Board.

Far-reaching powers are given to the Land Court to facilitate the constitution of new holdings. When the Commissioner of Small Holdings is satisfied that there is a demand for small holdings it is his duty to negotiate with landlords and to prepare a scheme. Failing agreement with the landlord, the Board may intimate to him that it proposes to apply to the Land Court to make an order for the constitution of new holdings, but before making such an order the Land Court must give all parties an opportunity of being heard. The Land Court will then determine what land may be made into new holdings, and what would be a fair rent for each new holding. The new landholder must by himself, or his family, with or without hired labour, cultivate his holding. The Act will come into operation on April 1st, 1912.

V. Shipping.

The *Merchant Shipping (Seamen's Allotment) Act* (c. 8) removes certain doubts as to the true interpretation of the Merchant Shipping Acts, 1894 to 1906, in respect of the payment of seamen's allotment notes. It is provided that by agreement with the master an allotment note may be granted to a seaman for payment of a greater sum than one-half of the wages; and payment at a period earlier than one month from the date of the agreement with the crew, and at intervals more frequent than one month.

The *Merchant Shipping (Stevedores and Trimmers) Act* (c. 41) enlarges the remedies of persons having claims for work done in connection with the stowing or discharging of ships' cargoes or the trimming of coal on board ships.

Effect is given by the *Maritime Conventions Act* (c. 57) to the two conventions signed at a Conference held in Brussels in 1910 which dealt with collisions between vessels and with salvage. Section 1 provides that where by the fault of two or more vessels damage or loss is caused to one or more of those vessels, the liability shall be in proportion to the degree in which each vessel was in fault, but if it is not possible to establish different degrees of fault the liability shall be apportioned equally, but no vessel is to be rendered liable for any loss or damage to which her fault has not contributed. Where loss of life or personal injuries are suffered the liability of the owners is to be joint and several. In relation to salvage it is the duty of the master or person in charge of a vessel, so far as he can do so without serious danger to his own vessel, to render assistance to every person, including subjects of a foreign State with whom we may be at war, who is in danger at sea.

VI. Social Reform.

After two and a half years' working of the Old Age Pensions Act of 1908 there has been passed an amending Act, the *Old Age Pensions Act* (c. 16). By Section 1 a person shall be deemed to have attained the age of seventy or sixty on the commencement of the day previous to his seventieth or sixtieth birthday. Section 2 amends Section 4 of the principal Act providing for the calculation of means. It is now determined that in calculating the means of a person the yearly value of property invested or capable of investment is to be taken as one-twentieth part of its capital value; that no account must be taken of the yearly value of furniture or personal effects if this total value does not exceed £50; and further that in the case of married couples living together the means of each is to be taken at half the total.

Section 3 amends the provisions of the principal Act as to nationality and residence. The condition as to nationality is removed in the case of a woman who satisfies the pension authorities that she would, but for her marriage with an alien, have fulfilled the conditions of the principal Act, and that at the date of the receipt of an old age pension the alien is dead, or the marriage has been dissolved or annulled, or she has been legally separated from or deserted by the alien.

Section 4 amends Section 3 of the principal Act by stating that relief given to a wife or relative is not to disqualify for a pension. Two years are now substituted for the ten years' disqualification period for persons convicted before or after the passing of this Act in cases where the term of imprisonment without the option of a fine does not exceed six weeks. A person in receipt of an old age pension who is convicted of an offence under the first Section of the Inebriates Act, 1898, will be disqualified for receiving an old age pension for six months after the date of his conviction, unless the court directs to the contrary.

The *Labourers (Ireland) Act* (c. 19) amends the law relating to the purchase of labourers' dwellings in Ireland. Sections 1 to 4 considerably strengthen the financial provisions. Under Section 5, the Irish Local Government Board is empowered, on the report of an inspector, to order the demolition of any house occupied as a dwelling house by a labourer and which is considered unfit for human habitation. If the owner fails to demolish the duty falls upon the local Council, and if the Council fail then the Board may appoint a paid officer to discharge the duty at the Council's expense.

VII. *Public Services.*

The *Telephone Transfer Act* (c. 26) makes provision for the transfer to the Postmaster-General of the plant, property, and assets, and of the staff of the National Telephone Company, and for the further improvement of telephonic communication. Part I. deals with the financial provisions. In addition to the telephone purchase-money a sum of £4,000,000 is granted to the Postmaster-General for developing the telephone system. Part II. deals with the taking over of the staff of the National Telephone Company, making provision as to superannuation of transferred officers.

By the *Railway Companies (Accounts and Returns) Act* (c. 34) the law relating to the accounts and returns of railway companies is amended. New schedules are prescribed of particulars of accounts which are to be sent in yearly to the Board of Trade by every railway company within sixty days of the expiration of the year. Incorporated companies must in addition send a copy to each share or debenture holder. The Board of Trade may by order alter or add to the particulars contained in the schedules. Objections to such alterations or additions may, under certain conditions, be made by the railway companies. The obligation to prepare and submit half-yearly accounts is removed, except in cases where those accounts are required in connection

with any guarantee of dividend. The Act comes into operation on January 1st, 1913.

BERTRAM WILSON

IRISH FISCAL AUTONOMY AND DIRECT TAXES.

AT the recent Economic Congress the unanimity of the proposals to make fiscal severance complete by the inclusion of the income tax in the scheme was noteworthy. The problems likely to arise are not peculiar to the technical details of the British system, but are inseparable, by the nature of the case, from any system framed on the same lines, and they may therefore be referred to general principles and related definitely to the main body of economic science, according to the effects of the proposals, under three main heads:—

(1) The prevailing tendency to a closer approximation to actual subjective sacrifice, *i.e.*, pure faculty.

(2) The doctrine that may be said to emerge from recent experience, which places the point of maximum efficiency at the point of maximum administration-area, with respect to difficulties arising under questions of (a) domicile, (b) widespread business with centralised management, and (c) evasion.

(3) The effects of double and differential taxation.

The idea that an income tax system can be divided arbitrarily without change in character or diminution in aggregate yield, arises mainly from an instinctive habit of regarding the levy as made directly upon the personal declaration of the payer at his domicile, a habit which prevails even amongst those who know and remember upon reflection our peculiar "Schedule" and indirect methods. The direct or total declaration method in Germany is successful chiefly by reason of the bureaucratic spirit that dominates the governmental systems, and a bureaucratic thoroughness that is tolerated by the people. It is the one apparent exception to the induction under (2); and the different States are rendered to a considerable extent independent of each other, only because the Federal nexus supplies the necessary width of administration-area. But the Schedule A tax upon an Irish farm may be intended to reach, by the process of deduction, a mortgagee or a ground landlord in Manchester, who is never required to declare that item of income at all, being perhaps at some point where the amount of his "total income" is immaterial, between the limits of abatement (as a minimum) and supertax (as a maximum), without any "earned income" being involved.

If a Dublin resident receives an income of £800 from English lands and companies (fully taxed by deduction), the question that first arises is whether the Irish Exchequer would be content to regard this income as "taxed" from Ireland's point of view, to levy no further charge thereon, although no duty has reached Irish funds, and to allow the recipient full representation without taxation. If the answer is that every income received in Ireland must be represented in the Irish revenue, the corollary is obvious. With taxation at the source continued under a divided system—for he would be held indeed who departed from it—Irish Schedule A must continue to be levied upon the farm already mentioned. Would the income therefrom in English hands be deemed "taxed" as if coming from an English holding, or would it be foreign income, taxable as income from possessions beyond the seas? Such double taxation exists, of course, upon income derived from some Colonies and foreign countries, but the question becomes quite different in degree in a case geographically so close, with interests so often interwoven, and where the interest-yielding superiority of a new over an old country (sufficient, may be, to offset any differential disadvantage through double taxation) is absent. The price of the extra sum paid by the Dublin resident into the Irish funds might prove to be the discouragement of a London investor considering Irish mortgages or Land Stock, as against some English investment. The credit of a Dublin Government floating a loan in London might not be assisted by the burden of a two-fold tax upon the promised interest, and the whole of a tax intended for English investors could conceivably be shifted to the Irish taxpayer in the interest charges.

Moreover, with double taxation, some special difficulties under 2 (a) (domicile) can arise, and the "piling up" of income in the respective countries, not to be remitted, but spent by the owner when resident, is likely. In the same way there may be a loss of duty as compared with the present conditions, possibly of a trifling character, wherever double domicile allows a division of income which can increase the abatements and allowances, or give exemptions, in each country; but under a supertax in each country on the present model (with liability *beginning* at £50 duty) the difference might prove very marked, although the individual effort in each case had not been to obtain advantages, but to avoid the disadvantages of double taxation.

The German solution of the problem, with the somewhat intricate regulations for settling in which State the various items shall pay duty, is instructive, and might indicate the lines of the

answer in our case, but it fails in direct application because (a) we have "flat" rates, and reach faculty by abatements (which often can only be granted by repayment), whereas they have graduated categories with a fixed duty for each stage, and the amount payable in the State which has to make allowances for income derived in other States (and paying tax in those States) is calculated in a manner somewhat analogous to the way in which our Estate Duty grants a deduction for duties paid in certain British possessions (Finance Act, 1894, s. 20); and because (b), the German system is federally controlled—a superior authority can decide between States—whereas we should have no controlling or deciding body unless some joint committee, with powers, were set up. Germany's treaty arrangement with Austria (since 1899) for mutual forbearance in the matter of double taxation is actually more in point here, until and unless the United Kingdom has a federal constitution.

It must not be forgotten that principle (1) has been the dominating feature of the evolution of our system during the past twenty years, and that it has meant a gradual change from the impersonal or objective to the personal or subjective, and this means that the "total income" idea (upon which all practical interpretation of the various allowances and reliefs to approach faculty must depend) has developed from being a mere small excrescence upon the system to completely permeating it, without, at the same time, changing the structure of the system itself.¹

If the solution of the double taxation difficulty is to be found in mutual exemptions, and each country agrees to forgo further taxation of income received from the other, the treatment of these sums in computing total income for abatement or supertax still remains a problem. If a Dublin resident has £160 per annum from Irish sources, and £160 per annum from English sources, all taxed (total income £320), and claims repayment on £160 abatement, will the Dublin Exchequer bear the brunt of the whole repayment, or expect Somerset House to forward one-half of the sum due? Here, although the greater impetus towards double domicile and "piling up" that double taxation might give is not present, the advantage to be gained by divided claims must not be overlooked.

Even the elimination of double taxation on actual items of income, and the removal of the possibility of getting increased abatements, &c., through the exclusion of the oversea items from

¹ Vide "Economic Aspects of Income Tax Change" (*Economic Review*, October, 1909), by the present writer.

total income claims (though such sums are actually remitted to the taxpayer) do not, however, prevent further effects of "deflection" through differential taxation (3). It has been repeatedly and confidently stated that one of the boons following Irish control of this tax is that it can be adapted to Irish needs, and expanded and modified as required quite apart from English views, *i.e.*, by variation of the rate and lowering the exemption limit or changing abatements. Postulating first an Irish exemption limit of £120 against the English £160, an Irish resident with £100 salary and £60 taxed investments from Ireland (total £160), would be liable on £40 at the higher rate to Ireland, but if the £60 came from England, he would get exemption and tax repaid from London; and similarly an English resident would find it more profitable to invest all his money in England. With such a postulate, the details may be varied in many ways, but the differential element against the investment of capital in Ireland cannot be wholly removed. This results only from the "adaptation" of abatements, &c., to Irish needs. If the change follows in the rates of tax, the effect is far more marked, because it covers the whole range of incomes—not merely the smaller ones—and the large investor is affected. If the Dublin Government has to come to London to raise money (even though there is no double taxation), the imposition of a rate of tax differentially against Irish investment might prove to be a game not worth the candle. So much from the English standpoint. From the Irish, the introduction of two standards of faculty introduces many strange possibilities. If the Dublin resident already referred to is regarded as fully taxed upon his £800 from England, he is only so taxed if judged by the English standard of faculty, for, if judged by the Irish standard, he is getting off too lightly (presuming an Irish rate of tax *higher* than the English rate has been imposed), and the temptation to impose a direct tax upon him equal to the difference would be irresistible, both from the point of view of the other residents with reference to faculty, and also to avoid a differential favour to investment of Dublin money "abroad" in England.

Skilfully as the German system avoids duplication of taxes by the different States upon the same items (with the mass of calculations and unremunerative administrative labour that is characteristic of it), it signally fails to avoid a species of double taxation by a *single* State upon certain classes of income. Deceived by the elaborate graduations which contrast so strikingly with our fixed rates, some have supposed the German approach to pure faculty to be throughout superior to ours. Professor Plehn says: "The

Prussian system comes nearest to the realisation of the taxation of faculty of any in the world."¹ This may be true for the higher incomes, or as between incomes derived from *precisely* the same sources, but it is not so for "mixed" incomes of moderate amount. From the method of assessing companies by graduation arises the anomaly that two incomes of the same amount, one derived from small companies, and the other from large companies, will *actually* suffer very different rates, although faculty is the same; or, put differently, similar dividends from one company going to form parts of incomes very different in faculty, may bear the same taxation.

If the actual avoidance of double taxation involves mutual forbearance in the case of all "mixed" incomes, some complicated scheme for sharing the cost of abatements and allowances seems inevitable, but the introduction of varied rates and faculty-standards brings further complexity if no discouragement to English capital is to result, and these notes only indicate in the briefest way the problems that arise.

The maximum area of administration has a wider significance than the mere question of changes of domicile. Changes of domicile are relevant with reference to liability on *foreign* income after a certain minimum period of residence; to such divided statements for supertax purposes, &c., through non-remittance of income as have been already mentioned; or to the deliberate avoidance of those areas where the rate of tax is highest. Administrative area has an important influence upon administrative efficiency, and that in two ways (2 (c)). The first is in a positive, informative capacity for assisting the authorities to assert liability, the primary, objective or "offensive" task of the administration. The second is in a negative, preventive capacity, secondary, subjective or defensive, in which the administration is resisting claims upon it for multifarious allowances, or is engaged in checking them. The latter is to-day perhaps the more important; for the first, by fixing liability upon sources of income as they are and where they are, so that it will filter through to recipients at the ends of the earth, is not so dependent upon area; whereas the second, in these days of highly diversified incomes, silent in transit and distant in origin, cannot fail to be of increasing significance.

But the problems under 2 (b) are of great importance, and one illustration must suffice. A London company has a large establishment (retail or factory) in Ireland. At present, liability on

¹ *Public Finance*, p. 187.

the whole profits exists in London, and taxation reaches the shareholders (*including the Irish*) by deduction from dividends paid from London. But a large part of the profits one year may be attributable to the Irish trade (and perhaps would suffice to pay the dividends of the Irish shareholders), and liability to a *separate* Irish tax would seem to be almost irresistible—the argument for it would stand firmly on two legs, for the trading or competitive interests would seek it, and the receivers of other Irish incomes would expect it. Profits made in Ireland out of Irishmen and paid to Irishmen, but bearing no Irish taxes! In the following year possibly the Irish results might involve a loss, though the *total* result in London might show a profit. If this company is asked to make a separate return of profits in each country, the attempt will reveal many difficulties—questions relating to joint expenses are always troublesome, and others relating to the prices at which goods should be invoiced when passing from one section to the other—that is, where the weight of profit or loss should be thrown—may be still more so. These difficulties may be accentuated where a wholesale house has also retail businesses, and anyone familiar with accounts knows that various complications can arise. The matter is not made easier if the rate of tax being higher in one country causes some slight alienations of profit therefrom, because the taxpayer in his computations throws the “benefit of the doubt” in such difficulties uniformly in one direction. German experience can be cited for some of the difficulties arising through branch profits being kept down by consignments from the parent establishment being made at highest possible prices.

One of the avowed objects of the advocates of complete fiscal autonomy is to reduce to a minimum the area in which points of friction and difficulty can possibly arise. Although none of the problems in a divided tax area are actually insoluble, the whole position may possibly call for drastic criticism in relation to one such objective as this. The prospects, after reflection, inevitably bring to mind as peculiarly applicable to the case in point, Professor Seligman’s solution for the United States, where the ramification of large businesses over many separate States is such a dominating feature, viz., that a successful income tax must be federally administered over the whole area, and some satisfactory basis adopted for the distribution of the proceeds amongst the various States.¹

¹ “The Relations of State and Federal Finance,” *North American Review*, November, 1909.

Some cognate difficulties arise in connection with Estate Duties, if the division extends the area in which separate treatment is given to items which would otherwise form part of one estate, and the graduated scale is therefore affected (either for foreign property as under the Finance Act, 1894, s. 2, or for Colonial property, s. 20), but they are more easily met, and these notes, briefly indicating some of the difficulties inherent in a complex system of income taxation, will perhaps also suffice to suggest that simplicity may not be a governing feature in all the stages towards Irish fiscal autonomy.

J. C. STAMP

DOCTORS AND INSURANCE IN GERMANY.

THE relations between sickness societies and doctors are not less acute in Germany than in this country. And the new German insurance law promises to make them still more acute. But Germany has behind her over twenty-five years of experience of compulsory sickness insurance, and, although she has not yet solved the problem of making satisfactory arrangements for medical service, enough should have happened in that stretch of time to enable the impartial observer to discern the direction in which the solution will probably lie, and to extract lessons for a country just about to tread the thorny uplands of compulsory insurance. In this note I propose briefly to set out some of the principal suggestions as regards medical arrangements which may be drawn from the history of insurance against sickness in Germany.

1. *Income Limit*.—This question has been rendered acute by the new law which brings within the range of compulsory insurance persons with incomes not exceeding £125 a year, whereas the previous limit for certain classes was £100. The organised doctors assert stridently that they will not treat on ordinary insurance terms any persons with income exceeding the old limit who are insured because of the extension of the limit.

The problem is still in the cauldron and not yet cooked, so I will not deal with it further here, since my object is to extract the lessons of German experience. It is not difficult to suggest a way out, and, with a little sweet reasonableness on both sides, it should not be very generous to arrive at a solution. But it must be admitted that the situation at present is strained and the immediate outlook threatening.

II. *Remuneration*.—Doctors prefer payment by fees according to services rendered. Societies strive for payment by

salaries, or, at least by capitation payments—so much per member per annum. The practice differs considerably, and there are several other varieties of form of payment. There is much to be said for the views both of the doctors and of the societies. A compromise is the natural outcome, and has been attained in many districts. A society, or a federation of societies, arranges with an association of the local doctors for the treatment of members on payment of an annual capitation fee. The association then distributes the total amount of the capitation fee among the practising doctors in such manner as may seem fit. A system of this kind is now in force in the case of some of the largest sickness societies of Germany—Leipsic, with some 200,000 members, Munich, Frankfort-Main, Stuttgart, to name only a few. The details differ, including the manner in which the amounts are divided among the participating doctors, but the general principle is the same. In addition to the capitation payments, extra fees may be paid for special services—for instance, serious operations. The capitation payment is also exclusive of hospital treatment.

Two incidental advantages of this system are (i) that it allows of the free choice of doctor, which is still a serious bone of contention in many parts of Germany; (ii) that it eases the problem of control, as will be shown later.

III. *Control*.—An ever-burning question of insurance is the control of the proceedings of doctors. It is vital to societies that doctors should give proper treatment, and that they should not give certificates of inability to work or prescriptions too complacently. It is important to doctors that they should have sympathetic, understanding supervision, and not be hampered or bullied by persons ignorant of their difficulties. In Germany the hard pressure of circumstances has hammered out what seems a fair solution, which follows on the system under which societies treat, not with individual doctors, but with the local association of doctors.

(a) The primary control over the practising doctors is exercised through their association, which appoints a committee (or committees) for the purpose. The committee deals with charges against doctors, and the society makes its complaints against an individual doctor, not to the doctor, but to the committee of his association.

(b) A conciliation committee, composed of equal representatives of the society (or federation) and of the doctors, settles disputes and discusses matters of common interest.

(c) An arbitration committee is appointed to act as a court of appeal. It must contain an equal number of representatives of both sides, and, possibly, also some impartial independent members. At Leipsic, for instance, the committee consists of three representatives of the society, three of the doctors, and three local government officials, one of the latter being the chairman. At Frankfort, the committee does not contain independent members, but if the parties cannot come to terms, an umpire is chosen—by lot if agreement as to the person to be appointed is not secured otherwise.

Such a scheme of organisation as that outlined, and there are many such in Germany, with local variations, is admirably devised to reconcile conflicting interests and to secure settlement of disputes before they reach the stage of acuteness which leads to danger. It appears generally to give satisfaction.

In addition, societies employ confidential advisers—sometimes chosen in consultation with the doctors' association—to advise them generally in their work, and to perform various other services best done by a doctor standing in a particular position of trust to the society, such as the examination of patients suspected of malingering and of patients recommended for special treatment. Arrangements are devised so that these confidential advisers shall work amicably with the doctors' association.

IV.

Summarising briefly the main tendencies of the facts stated, they go to show that:—

(1) Societies (or other insurance authorities) should treat with organised groups (corporations) of doctors for the treatment of members; and

(2) payment for treatment should be made to the corporation,

(3) to be divided among the individual doctors as seems good to the corporation.

(4) Control over doctors should be exercised mainly through the corporation.

(5) There should be systematic means for settling the inevitable disputes.

Incidentally, it will be readily seen that, quite apart from insurance, such a scheme is big with promise of a new development in medical organisation.

I. G. GIBBON

THE FUTURE OF TRADE UNIONISM.

IN every trade union there are, roughly, four classes of men. There is, of course, no broad line of division between these classes, and the proportion of members in each class varies considerably in different unions. But looking at the world of trade unionism as a whole, one can say that on the average—

(1) About 20 per cent. of the members of trade unions are "dead-heads," more or less passive members, some of whom look upon the union as little more than a sick benefit society. These men very rarely attend a meeting of the society; a small number of them are members only because they have been to some degree coerced to join.

(2) About 50 per cent. of the members are genuine trade unionists, men who thoroughly believe in the virtues of collective bargaining and in the principles of combination.

(3) About 20 per cent. to 25 per cent. of the members are men who, in addition to being good convinced trade unionists, have also a keen mental vigour and an inclination towards politics. These men, who have been the salt of the trade union movement, tend to become Socialists; they are often members of the local I.L.P. They are often the delegates from their unions to the local trades councils. Most of the representatives of Labour on local governing bodies are men of this class.

(4) 5 to 10 per cent. of the members are "irreconcilables," men who have faith in nothing save their own energies; they usually call themselves revolutionary Socialists; they claim to be Marxists (ignoring the fact that Marx repudiated and detested the idea of revolution); they take up each of the new revolutionary doctrines as it arises and propagate it vehemently. At present they are calling themselves Industrial Unionists and Syndicalists.

It is now to be noted that each of these sections in the trade union movement has been sharply goaded by the events of the last three or four years.

The "dead-heads" have been aroused by the steady rise in prices. Their souls are in their pockets, and, if not in so many words, they have realised that the man who is now earning 20s. per week could have bought with it goods to the value of 21s. fifteen years ago.

The "unionists" have by the same fact had, not only their wages reduced, but also their faith in collective bargaining and in combination rudely shaken. "Trade unions exist to improve

wages and conditions of labour," they say. "But our real wages are *less* and our conditions are not much better." Clearly there is something wrong with unionism.

The "politicians" who have more or less unanimously practised the precepts of John Stuart Mill's followers, and have urged their unions to take political action, to gain an influence in legislation, to prefer working through Parliament to using the strike—these men are stung to anger, not only by high prices, but by the Osborne judgment. Their activities, their most cherished ideals, are suddenly declared illegal, and the fabric which has been built up by two generations of earnest, patient, long-suffering politicians is seriously endangered.

The "irreconcilables" have been further infuriated by what appears to them to be the futility of the Labour party in Parliament. "The Labour party is a mere wing of the Liberal party. It has been captured by the capitalists. We always said that nothing but strikes, and strikes, and more strikes, would be of any use to the workers. We always knew that nothing but a fierce acceptance of the class war would be any good. We have always preached red revolution, and now we are proved to be right." Such is the cry of that small minority, whose vehemence often leads thoughtless people into believing that they really do represent trade unionism.

Certainly there has been some excuse for that belief during the past year, for such cries have been very prevalent. But in view of the events indicated above, would it not have been remarkable if there had not been serious discontent and unrest? And would it not have been even more remarkable if that unrest had not been generally expressed in the terms of "the irreconcilables"? It was not so much that men suddenly came to believe in Syndicalism, in revolution, in violence. It was simply that their discontent found expression in the terms of revolution; just as in any State where there is political and economic unrest the form of expression is usually, and probably will continue to be, Republicanism.

Indeed, the majority of trade unionists are far from being revolutionaries; they belong to all political parties, and it is very unlikely that the trade union movement will become preponderantly even Socialist. What is much more likely is that the activities of most of the keener minds in the movement will be devoted to reaffirming and extending the true principles of trade unionism.

A stimulus of exceptional value has, in fact, almost suddenly

been applied to trade unionists. Economists have for some years been studying what is called "the Trust movement," and have long been familiar with the fact that most of the largest English industries are under the more or less complete control of combinations of employers. But the English trade unionist has only just begun to realise that opposing his 1,300 unions there are now 1,200 combinations of employers. In other words, while the trade union movement has been concentrating the greater part of its energies on political action, the employers have been stealing trade union thunder and practising very effectively the principles of combination and collective bargaining.

The revelation of these developments is already having a remarkable effect. All sections of unionists, save possibly the "dead-heads," receive from it a powerful motive to advocate federation or amalgamation. All sections are quite prepared to believe that what the employers have adopted must be advantageous. The true unionist has his faith in his principles strangely confirmed. The "political" member has always desired increased membership and federation. The "irreconcilables" have longed for the sympathetic strike and the general strike.

Thus there is beginning a great agitation for federation and amalgamation. The "irreconcilables" themselves have actually begun to realise that the general strike is impossible until the unions in allied industries are linked up into one organisation. Formerly, as industrial unionists advocating a combination of wage-earners irrespective of trades, they tended to look upon existing unions as obstructive vested interests. But now it becomes clear that the necessary policy is that, for example, all the unions of men working in the iron and steel industries shall either *federate* and form a joint committee for strike purposes, while still retaining their identity and autonomy for all other objects, or shall actually amalgamate, join the Amalgamated Society of Engineers, and form one great union for all purposes.

This is the real significance of the seamen's, dockers', and carters' strike, which has been a wonderful object-lesson in the principles of federation of all the chief sections of those workers engaged in transport. This, again, is the value to trade unionists of the strike of railway workers, in which the four chief unions acted together. And although both these strikes contained elements that can hardly be attributed to trade unionism, there can be no doubt that their effect on the resurgent policy of trade unionists will be immense.

It must not be imagined that this policy of federation and

amalgamation is new. The idea was mooted by Robert Owen, and in 1850 had already made possible the Amalgamated Society of Engineers. The principle also lies behind the formation of the Trades Union Congress and the General Federation of Trade Unions. But hitherto its advocacy has been little more than half-hearted. It was scotched partly by the growing political activities of the unions in the attempt to form a Parliamentary Labour party. Thus the few amalgamations that have taken place have been spasmodic and only very moderately successful, even with the engineers.

But present conditions in the industrial world are very different. Everything, and in particular the similar policy of the employers, seems to point the unions to the plan of forming ultimately some seven or eight immense groups of unions, each group representing one great industry—the iron and steel trades, the building trades, the mining industries, the textile workers, and so on. Already there seems to be an approach to completion of the negotiations for the amalgamation of the Trades Union Congress and the General Federation of Trade Unions. Already the four independent unions of railway workers are on the brink of coalescence, and there can be no doubt that in the near future much oratory, much vehemence, and much money, will be expended by trade unionists in pushing what is, after all, the genuine basis of trade unionism. The Secretary of the General Federation of Trade Unions (Mr. W. A. Appleton) has already set the tune in a pamphlet entitled *The Trade Union Movement*, and the wisdom with which federation is advocated may be gauged by the fact that Mr. Appleton foresees the difficulties of converting the paid officials of smaller societies which may be absorbed: he wisely advocates that all such displaced faithful servants must either be found posts of equal security or be compensated, possibly by a pension.

A further fillip to the movement is provided by the Chancellor's concessions to small societies under his Insurance Bill. Even the State is going to give them every inducement to link themselves up with other allied societies.

What the results will be it would, of course, be foolish to predict. But speculation is not out of place here; and it is suggestive to ask whether the trade union movement will be able to maintain two strenuous lines of propaganda: (1) its political work, (2) its severe new union activity. The federated societies will, of course, save expense by their coalescence, but it is very doubtful whether they can find money enough, and, what is

much more important, leaders enough to run the two campaigns. It must always be remembered, too, that the bulk of the members are not actively enthusiastic about the utilisation of their societies by the Labour party. The question is further complicated by the fact of payment of members of Parliament, and it really seems as if, even though the Osborne judgment be completely reversed, the unions as such may be driven to take less and less part in politics, and that the Labour party will become more and more definitely a Socialist party, depending for its support mainly on local branches of the I.L.P., on Clarion Fellowships and the other Socialist organisations.

What, however, does seem quite clear is that trade unionism is going to gain an enormous access of strength if it really takes up once more its old policy of amalgamation and makes it effective. It is quite possible, indeed, that for a few years the political activity of the unions may be partly diverted to this kind of propaganda; but the ultimate gain of strength and wealth will almost certainly enable them to devote in the long run far more effort and money to the support of their own candidates.

In any case, it is certain that no legislation against the right to strike can hinder very effectively the growth of power of trade unions. Such legislation *may* make union leaders a little less ready to advocate a strike; but no law can compel men to work if they do not wish, no law can effectively punish all the members of a large union. In fact, any attempts to get such legislation partake very much of the nature of religious persecution; the more men are oppressed by such laws the more determined will be their resistance.

Thus, on all counts it seems better to be prepared for a great revival of trade unionism, and to look rather for more labour disputes than for less, unless, indeed, the employers make genuine attempts to remove the grievances under which the great majority of workers believe themselves to be labouring.

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THE COST OF FOOD TO THE CONSUMER.

THE following particulars regarding the retail prices charged in an inland residential town for certain articles of food are based upon dealings with a firm of grocers and a butcher. Both shops do a good, and in the case of the grocers a very large, family trade. The period covered by the accounts for groceries

is seventeen years, and in those for meat nearly eleven years. The articles supplied were of a uniformly good quality, such as would be required in households comfortably off. Stress is laid on this matter of uniform quality, as it is essential to the value of the present record.

Beginning with the cost of meat, at the commencement of 1902 prices per pound stood as follows :—

	d.		s. d.
Rolled ribs of beef	10	Beef steak	1 0
Leg of mutton	10½	Mutton chops	1 0
Leg of pork	8	Rolled veal	11

In December of the same year pork rose to 9d., and stood at that price till January, 1907, when it rose to 10d. No further change has taken place. With the exception of a brief rise to 1s. 1d. in 1902, the price of chops has not varied, and is now (November, 1911) the same as ten years ago. Leg of mutton remained stationary until January, 1904, when it fell to 10d., but rose in the following April to 10½d., and in January, 1905, to 11d. It fell back the next June to 10½d., and has since stood still. Beef rose to 10½d. in May, 1902, but fell back to 10d. in October of the same year. At this price, with the exception of a brief rise to 10½d. in July, 1910, it has since remained. Similarly, beef steak rose to 1s. 1d. in the spring and to 1s. 2d. in the summer of 1902, but fell back to 1s. 1d. in February, 1903, and has undergone no subsequent change. Rolled veal rose to 1s. in 1905, and continues at that price. Veal cutlet is dearer.

The record of dealings in groceries begins in September, 1894. At that date prices per pound for the articles in most constant use were as follows :—

	s. d.		s. d.
Pure coffee	1 8	Tea (black)	2 0
Cheese	10	Lump sugar	2½
Fresh butter	1 3	Smoked bacon	10d. to 11d.

At the beginning of 1896 coffee rose to 1s. 10d. a pound, and has ever since oscillated between the two prices, though the lower rate of 1s. 8d. has been the more usual. Neither changes of season nor such public events as the Boer War appear to have influenced these variations. Tea, as a rule Mazawattee, has had a much wider range. The usual price has been 2s. (now and then falling to 1s. 6d.), but it has touched 2s. 2d. in 1898 and 1904. On the second occasion, the duty had just been raised from 5d. to 8d. in the pound, and this may have caused the rise, but the price had fallen back to 2s. in January, 1905—some months; therefore, before the duty was reduced in that year to 6d.

In the case of sugar, the imposition of an import duty in 1901 did not affect the price, which continued steady at $2\frac{1}{2}$ d. a pound for ten years from the commencement of the record. In September, 1904, lump sugar for the first time rose to 3d., and remained at that price till February, 1905, when it went up to $3\frac{1}{2}$ d., its highest figure. In May it fell back to 3d., and in September of the same year to its old price of $2\frac{1}{2}$ d. Early in 1908 it stood again at 3d., but fell to $2\frac{1}{2}$ d. in May, the duty having been reduced. Since then the price has oscillated between $2\frac{1}{2}$ d. and 3d., and is now (January, 1912) at the higher figure.

The quality of the cheese consumed varied so much during the earlier years that a record of prices would be valueless. Gruyère cheese fell from 1s. in 1903 to $10\frac{1}{2}$ d. in 1906, touched 1s. 1d. in 1907, stood at 1s. during the next three years, and last summer was again 1s. 1d. Dutch cheese rose from $8\frac{1}{2}$ d. in 1908 to 9d. in 1910, and to $9\frac{1}{2}$ d. last April.

The articles which have exhibited the greatest variations have been butter and bacon. The fluctuations in butter have been chiefly seasonal, and have pursued a fairly regular cycle within each year. It has invariably been cheapest in the latter half of May or the beginning of June, when pastures are at their greenest and grass most abundant, that is to say, just before hay harvest. The annual maximum has usually been in midwinter, but in 1899, and again in 1906, it occurred about Michaelmas after a spell of heat and drought. The actually highest price reached during the whole period of seventeen years was 1s. 7d. This occurred during a very severe and long-continued frost, in February, 1895. It has been 1s. 5d. or 1s. 6d. in every other winter except in 1904-5, when it did not rise above 1s. 4d. The bottom price of 10d. occurred in June, 1896. In other years it was 11d. until 1901, when it did not fall below 1s., and this has been the minimum in every subsequent year except 1902, when it was 1s. 1d. On the whole, taking one year with another, butter has manifested no general tendency to rise until the drought of last summer. The price was already 1s. 6d. in August, 1911, continuing at this figure until December, and is now 1s. 4d.

Bacon fell gradually from 11d. a pound at the end of 1894 to 9d. at the beginning of 1896. From that date till the end of 1897 the price, with occasional fluctuations, moved up to $10\frac{1}{2}$ d. The price, for bacon of the same quality, has not been so low as 9d. since April, 1897. It varied between 10d. and $10\frac{1}{2}$ d. until October, 1900, when it reached 11d., and continued to mount up till it touched 1s. 1d. in July, 1901. It continued at 1s. or 1s. 1d.

until November, 1902, when it dropped to 11d., and a period of corresponding cheapness, with prices between 10d. and 11½d., and only once touching 1s., set in and lasted till March, 1905. During the summer of that year the price was generally 1s., and in the following winter 11½d. From April, 1906, it rose gradually to 1s. 0½d. and 1s. 1d. From January to April, 1907, it was 1s., and thereafter almost invariably 1s. 1d. until November, when it declined, and during the first half of 1908 stood at 11d. or 11½d. In July it rose to 1s., and in September to 1s. 1d., but in November gradually dropped to 11½d., the price going back to 1s. in March, 1909. In May it rose to 1s. 1½d., and in July to 1s. 2d., and to 1s. 2½d. in September. Again it dropped as winter approached to 1s., and during the first half of 1910 shifted a good deal between 10½d. and 1s. 1d. At the end of August of that year it touched 1s. 3d., its highest point during the whole series of years. Since then the price has usually hovered between 1s. 1d. and 1s. 2d., but a decline has set in, and the present price is 11½d. A general tendency has asserted itself of late years for bacon to be dearest at the end of summer and cheapest during the winter months.

Thus there appears to have been no marked rise of late locally in the price of fresh meat (which for the most part is killed in the town itself). The upward movement was chiefly in evidence between 1902 and 1905. The principal rise has been in pork, which went up 25 per cent. between 1901 and 1907, but has since remained steady. Next to pork, bacon has risen most. Pressed beef has risen within the last three years from 1s. 1d. to 1s. 3d. the 2-lb. tin. Butter has remained at a high price longer than usual during the last few months. Other changes have not been marked.

C. H. D'E. LEPPINGTON

January, 1912.

THE RHENISH-WESTPHALIAN COAL SYNDICATE.

THE Rhenish-Westphalian Coal Syndicate, the combination of colliery firms, which since 1893 has controlled almost the whole of the coal, coke, briquettes and bye-products produced in the "Ruhr District" (Germany's chief coalfield) is, without doubt, one of the most remarkable organisations in modern industry. Unique in many respects, it has been rightly termed "the largest and most effective combination in Europe, if not, indeed, in the whole world. . . ."¹ The very existence of such a combination

¹ *U.S. Industrial Commission Report*. Vol. xviii. Introduction and Chap. v.

is indeed a source of considerable wonder to those acquainted with the "fighting trade" prevailing throughout the English coalfields, and the inglorious career of combination schemes therein, ever since the dissolution of the Newcastle Vend in 1844. The difficulties to be encountered are only too well known to those connected with the English trade.

The agreement upon which the Rhenish-Westphalian Syndicate is based expires in 1915, and for some time already, coal producers, and the general public in Germany as well, have been anxiously discussing the prospects of its renewal.* Their anxiety is all the greater owing to the uncertainty as to the renewal of the Stahlwerksverband, which expires in 1912; for it is believed that both syndicates must stand or fall together. The *débâcle* which would follow the dissolution of either has drawn the attention of the Government to the matter. It is openly maintained by prominent coalowners that the Government will insist upon the renewal of the Coal Syndicate,* as an organisation essential to the welfare of the industry and those dependent upon it. The Prussian Secretary of State for Commerce has stated that the Government was even ready to become a member of the Syndicate, provided it received sufficient guarantees for the protection of the interests of the public; and that its renewal was desirable on grounds of common economic interests, since its dissolution would greatly affect the position of German industries, workmen, individual communities, and even the revenue interests of the State."¹ The Government has already compelled the renewal of the Potash Syndicate (of which it is a member), and this precedent is being freely quoted. Of late years the Syndicate has been strengthening its position, and its policy as regards output and prices has received considerable attention. Whatever its future may be, the present juncture seems convenient for some indication of a few general conditions which have determined its successful development up to the present.

The events which led up to its formation are briefly as follows. The colliery firms of Rhenish-Westphalia had suffered very severely from their mutual competition and consequent irregularity of production. Increasing prices greatly stimulated production; with the receding tide producers undercut each other recklessly, and reluctant to reduce output, aggravated the ensuing depression. This led to a period of experiment with various forms of com-

¹ Cp. *Diplomatic and Consular Reports, Germany*, 1911, Cd. 5465—166, pp. 13, 16 and *passim*.

bination from 1877 onwards. Finally in 1898 (a time of severe depression), the Rhenish-Westphalian Coal Syndicate was established to combine all the colliery firms in Rhenish-Westphalia. In 1903 the Syndicate was renewed upon a much firmer basis to continue until 1915, the Coke and Briquette Syndicates being merged with it.

Its avowed objects are the cessation of price competition, the regulation of production between the members, and the attainment of lucrative if moderate prices whereby fluctuations of output and prices may be minimised. So far, these aims have been realised to a surprising degree. The "Ruhr District" produces about 60 per cent. of Germany's coal output; in 1910 its production was 86,846,599 tons, of which only 5,492,257 tons came from non-syndicated mines—fiscal and private.¹ The increased coal export falls largely to the credit of the Syndicate.²

The organisation by which the aims of the Syndicate are attained may be explained briefly thus. To eliminate mutual competition, the Syndicate acts as a corporate sales agency for all the products put on the market by member firms. It is registered as a joint stock company, with a nominal capital of 900,000 marks (in shares of 300 marks each), held exclusively by the combined firms, and invested for the most part in a transport undertaking. From its palatial headquarters at Essen the Syndicate carries on the purchase and sale of coal, coke and briquettes, the acquisition of mining land and shares, and the operation of any enterprises concerned with the storage, sale, transportation, or extended production of mining products.³ It has the ordinary organs of the "Actiengesellschaft"—the General Assembly, Supervisory Board, and Executive Committee, each with the usual powers and functions. By a contract with the member firms, individually, it undertakes to purchase and sell the whole of their products under agreed terms. Purchases can be made from firms outside the combination, should necessity arise.

The "General Assembly" elects annually a third of the Supervisory Board composed of nine members, each 300 mark share carrying the right to one vote. This Board appoints the Executive Committee, and exercises general supervision over the Syndicate's operations. The latter committee, consisting of four members, carries out the chief functions of the Syndicate, *e.g.*, the purchase and sale of the members' products, the determina-

¹ *Diplomatic and Consular Reports for Germany, 1911, C.* 5465-166, pp. 68-72.

² *Ibid.* p. 71.

³ Regulations of the Syndicate.

tion of accounting prices for purchases, and actual selling prices, the auditing of the accounts of member firms, and the proposal of fines for detected breaches of agreements; also the suggestion of levies upon the member firms to cover the expenses of the Syndicate, which has no profits or losses in the ordinary sense.

For the organisation of sales the Syndicate is divided into four departments, each controlling specified areas. A special selling agency deals with all orders under 6,000 tons, according to the locality. The wholesale dealers in competitive districts are organised by the Syndicate into "Kohlenkontore," and given exclusive rights over the Syndicate's products, conditionally and under its direct control. Such companies are located at Dortmund, Bremen, Cassel, Hannover, Magdeburg, Utrecht, and at Düsseldorf for the Rhine trade. Price-cutting among the wholesale dealers and middlemen is prevented, for the Syndicate prescribes minutely the conditions under which they shall deal in its products, and thus regulates their distribution completely.

The combined collieries contract to sell all their products to the Syndicate, and to join with it for the maintenance of certain organisations, and regulations for carrying on the trade, which are to receive implicit observance. The former comprise a General Assembly of mineowners, which meets monthly and elects annually two executive organs—an Advisory Council and a "Commission" for fixing the allotments of member firms out of the total output. The General Assembly also fixes the total volume of production, and the compensation or fines for members who fall short of or exceed their allotted quotas, and manages the holding of shares in the Syndicate. One vote is allowed for every 10,000 tons of production.

The mineowners elect the members of the Advisory Council—one member for every 1,000,000 tons of output. This body finally determines the assessment of levies and penalties suggested by the Executive Committee of the Syndicate, fixes the general price policy, hears appeals from mineowners, and suggests the members of the "Participation Committee." This latter Committee consists of two technical experts, a merchant, and a member of the Executive Committee of the Syndicate, and it allots to the member collieries their shares in the total output determined by the General Assembly of the mineowners.

To guide the organs of the combination in their general policy a series of specific regulations are observed.

First as to the penalties for breaches of agreements by the members, there is a maximum of 1,000 marks

for all save evasions of the selling agreement, for which the fine is 50 marks per ton. The selling mines are responsible for the supply, weight, and quality of coal, &c., contracted for. The assessment of levies to meet current expenses is made according to a fixed scale of outputs. All accounts are settled monthly. "Normal" prices, fixed by the Advisory Committee, must guide the Syndicate's Executive in fixing the prices at which it buys from the collieries and effects sales. Excess of the selling prices over purchase prices goes to the mine supplying the products. Losses on coal sold cheaply in competitive areas are met by general levies.

No mine can increase its "participation" unless trade conditions allow a general increase, or those of other mines are "bought out." Voluntary reduction of participation is allowed on one month's notice. The cost of extending the interests of the Syndicate by the purchase of virgin coal measures, transport rights, mining shares, &c., are met by general levies.¹

The fact of vital importance is that the various agreements of the Syndicate are legally recognised and enforceable. They are therefore actually binding and effective, not merely nominal as in many English temporary combinations. This circumstance, the strict definition of rights and obligations, and the provision made for every conceivable emergency contribute to the efficient restriction of competition.

So far, the operation of the Syndicate has been very successful. Its price policy varies in competitive and non-competitive regions. In the former, *e.g.*, Holland, Belgium, Baltic and Mediterranean ports, it is mainly determined by the state of foreign competition. In the latter areas, the price policy is determined according to the industrial "conjunctur" of Rhenish-Westphalia. The prices fixed by the Syndicate are, in the main, the official prices throughout the coalfield, and owing to its predominant influence they do not follow the fluctuations of industrial activity as closely as do coal prices in England. Its power over coke and briquette prices is a valuable asset.

As regards output, the Syndicate's policy is determined according to industrial demands, the state of imports and exports, and the weather. The "participations" of the member firms are allotted according to their productive capacity; their actual production is regulated proportionately, according to the state of

¹ This has tended greatly to increase the community of interest between the syndicate firms. It really creates an element of permanent union and holds members together.

trade. The Syndicate aims at that production which is "profitably," rather than what is "technically" possible. The fixing of participations involves the principle of restricting supply according to demand, although most admit that the supply has been adequate so far.

The policy of the Syndicate has been favourable to the development of the industry generally. The "Ruhr District" is second to none in technique, in organisation of production and distribution, in economical development of resources, in export trade, &c.

Originally the Syndicate had little connection with questions of labour. Of late years much joint action has been taken in such matters. Large expenditures are made for providing dwellings, washing arrangements for the workmen, as well as for meeting the various social burdens—insurance, "Knappschaft," contributions, &c. The Syndicate has recently established "Labour Exchanges," through which alone miners are engaged, for the purpose of checking irregularities on the part of workmen. It is significant to note that wages, conditions of employment, and living are higher in the "Ruhr" than in any other coalfield in Germany.

The conditions which have undoubtedly favoured the development of the Syndicate are various. The natural location of coal measures in Germany is highly favourable. Coal is worked chiefly in three districts, all situated in Prussia, viz., Rhenish-Westphalia, Upper Silesia, and the "Saar" District (South-West Rhine Province). Small deposits are mined in Saxony, Lower Silesia, and the "Aachen District." Coal is not distributed over a large number of important coalfields as in England, where one can compete with another according to the trend of prices. The "Ruhr" is practically independent of competition from the other coalfields of Germany, supplies the bulk of the local demand from industries in Prussia, and holds the greater part of the export trade.

Moreover, the Ruhr coalfield is very much concentrated in area, and the measures are fairly uniform in character. Consequently the colliery firms are not only in close touch with one another, but their conditions of production and distribution are much alike. The determination of a satisfactory basis of agreement is thus greatly facilitated.

The quality of the "Ruhr" coals gives producers in this district a further advantage in the market. They are of greater value for steaming, manufacturing, or gas purposes than those of other districts. These "protective advantages" are increased by the

position of Ruhr producers in the matter of transport. Their proximity to the chief centres of consumption, and also to those important means of distribution—the Rhine for Swiss, internal, and coastwise trade, and the Dortmund-Ems Canal for Baltic and North Sea trade—is a further differential advantage. The interests of the Syndicate in transport companies, its monopolistic control over the wholesale trade, and the favourable rates granted to Ruhr coals by the State railways, further increase the natural advantages it possesses as regards transport facilities.

The firms in the Syndicate are favourably situated as regards both “potential” and “actual” competition. By means of levies upon the members, it has purchased controlling interests in un-worked measures. The restriction of production checks the rash development of new properties beyond market needs and to the loss of existing firms.

The existing colliery firms are comparatively few in number. For many years a process of consolidation has been reducing their number, and increasing their size. This is partly the result of the natural tendency towards the centralised production of coal made necessary by modern conditions of the industry; partly the result of the consolidation of interests which has been resorted to by large firms to increase their participations, those of small firms having been “bought out.” The extension of Syndicate interests by means of joint levies has led to such a fusion of interests, that even were the Syndicate dissolved, a strongly placed union of mining interests would remain.

Not only are the Ruhr firms few in number, but production is highly concentrated between them. Twenty firms produce close upon 2,000,000 tons apiece, six of the largest produce over 29,000,000 tons of coal between them.¹ The total production in 1911 was 86,846,599 tons; the important firms in the Ruhr number about sixty-five, 93·5 per cent. of the output coming from Syndicate firms.² Another very favourable condition for effective combination is thus fulfilled.

The admirable organisation and impartial administration of the Syndicate have greatly assisted its effective development; the natural faculty of the Bergwerksdirektor for organisation seems well adapted to their intricacies. The legal guarantees for strict observance of agreements have created a feeling of general con-

¹ *Die Bergwerke u. Salinen im neuderrheinisch Westfälischen Bergbaubezirk* pp. 4 and 5.

² *Ibid.*, and *Diplomatic and Consular Reports for Germany*, 1911, Cd. 5465-166 p. 72.

fidence in the working of the Syndicate; mutual suspicion and consequent disruption are prevented. Thus it has been able to steer clear of the reefs upon which so many temporary combinations in England and the United States have been shattered—mistrust between members as to the observance of agreements which lack legal sanction. The Syndicate can exercise its wide authority almost as promptly and vigorously as a single company or an amalgamation of firms.

The existence of preferential clauses in the contracts for exclusive customers, enables the Syndicate to utilise for the maintenance of its position the system of "deferred rebates," which has been so powerful a weapon of the Shipping Conferences. Customers are retained and outside firms are boycotted.

Moreover, various circumstances have compelled the Syndicate firms to keep together, if only in sheer self-defence. The existence of Kartels in the various industries consuming coal, necessitates combined action on the part of the producers. This is all the more necessary in that recent years have witnessed a remarkable growth in the "coal-consumers' associations" formed to exact favourable conditions in the purchase of coal. The aggressive attitude of the miners' organisations has convinced the colliery firms that it is only the determined and united policy of the Syndicate in maintaining stocks of coke and regulating the terms under which miners are engaged, and so forth, that thwarts the avowed designs of miners for a general stoppage.

The burdens placed upon mining enterprises by legislation, e.g., compulsory maintenance of mining schools, insurance schemes, &c., make joint action on the part of colliery firms a necessary and profitable procedure.

Most of the Ruhr collieries possess "briquette" or "bye-product" coking plant; and if it were not for the Syndicate they would meet in disastrous competition at many points. The chemical industries of Germany make a heavy demand for chemical bye-products, and the demand for briquettes is also increasing. The combined action of the mines enables them to exploit these demands to the full.

The conviction that the Syndicate is essential for effective resistance to foreign competitors in the world's markets, and for maintaining the German export trade, has proved a valuable asset to the Syndicate. Its remarkable success in this connection has been very conducive to its popularity. Moreover, all the leading producers realise that whatever the defects of the Syndicate, the present conditions are infinitely preferable to the *débâcle*

of a "fighting trade." These convictions, coupled with the general confidence of industrial leaders in Germany in the Kartelle system, have produced an atmosphere very favourable to the Syndicate. Its remarkable success, and the extension and consolidation of its interests during the last eighteen years, furnish practical proofs in its favour.

Although the possibility of any scheme of combination in the English industry generally appears as remote as ever, the prospects of the renewal of the Westphalian Syndicate seem to be constantly increasing, in spite of the fact that it is faced with several difficult problems—the participation, for example, due to colliery firms who also produce iron or steel (the Hüttenzechen), the regulation of the output of coking coal, the inclusion in the Syndicate of collieries in the Saar District (South West Rhineland), the provision of sufficient guarantees to secure the inclusion of the fiscal mines, the general readjustment of participations, &c.

However, the very favourable attitude of the leading colliery firms and above all of the Government, and the resumption of negotiations between the Syndicate, the non-syndicated mines, and the coal consumers' associations, are circumstances of the utmost significance.

On all sides, especially in the markets for mining shares, one meets with frank expression of the disasters which must ensue should the Syndicate be broken up.¹ Hence arises the threat of the Government to reconstruct and join the Syndicate, possessing itself, at the same time, of a right of veto in the question of prices. The expenses of the fiscal mines are notoriously high, so that their lowest price limit must always leave the Syndicate firms a fair margin.

The strategic position of the Syndicate is very strong, both as regards its practical and moral powers, and it seems highly probable that in the long run these must tell in favour of its renewal.

G. R. CARTER

OFFICIAL PAPERS.

Report upon the Operations of the Paper Currency Department of the Government of India during the Year 1910-11. (Calcutta. 1911. Pp. 55°) .

MR. R. W. GILLAN, the new Comptroller-General and Head Commissioner of Paper Currency in India, has lately issued a

¹ Cf. *Diplomatic and Consular Reports*, 1911, Cd. 5465-16, p. 67.

report of exceptional interest, to which the attention of all students of Indian Currency Problems should be directed. Mr. Gillan begins by giving a useful account of the various Government balances and reserves, and of their interconnection, from which currency is supplied in accordance with the needs of trade. But the part of the Report which is of unusual importance is that in which he discusses the present position of gold in India as a medium of circulation. The following is an abstract of his main conclusions :—

When banks import sovereigns into India, it is usually for the purpose of obtaining some other form of currency. They deposit the gold, therefore, with Government immediately on import and draw out notes. When the need for currency arises, they return the notes, and the form in which the currency is drawn out depends on the requirements of the time. Thus the amounts of gold imported and the amounts passed into circulation are determined by different considerations. To consider, therefore, the effect of gold imports on the currency, it is necessary to examine the figures of absorption. In spite of the restriction of the supplies of gold in exchange for notes or rupees during 1908–10, the absorption in the last five years has reached a total of $20\frac{1}{2}$ millions sterling, and amounted in the year under review (1910–11) to £7,187,000.

These figures seem to indicate that the apprehension that the sovereign would not be popular was not well founded, and this conclusion is supported by the other evidence Mr. Gillan has been able to collect. In the Punjab, where the figures of absorption are highest and where the cultivator takes gold freely, they suggest a higher proportion of gold in payments than the quarter or third at which banking opinion puts the proportion of the wheat crop now financed in gold. In Bombay the use of gold in payment for the cotton crop is extending. But sovereigns do not seem to be used in payment for jute, produce being at present seldom paid for in gold either in the eastern parts of the United Provinces or in the two Bengals. In fact, in provinces other than the Punjab, when gold is taken out, it is apt to be for the purpose of remittance primarily, and is exchanged back for silver on reaching its destination. Moreover, the acceptance of gold by the cultivator for his crops is often in the nature of barter, the currency use of the sovereign being of a temporary nature; that is to say, he takes the gold not as coin merely but for some other purpose, and the return of gold in payment of revenue may be no more than the return of so much as he finds himself unable

to retain. There is evidence also that large numbers of sovereigns are melted down by the smaller bullion dealers for use in the arts.

It is clear, therefore, that there is no longer, if there ever was, any prejudice against sovereigns. They are hoarded, melted, and used for distant remittances. But how far have they truly established themselves as a circulating medium, as a regular part of the currency? Perhaps the best indication is to be found in the figures of receipts by Post Offices and Railways.

	1907-8.	1908-9.	1909-10.	1910-11.
	£	£	£	£
Post Offices	1,358,000	1,001,000	265,000	638,000
Railways	1,045,000	710,000	134,000	597,000

The inference from these figures certainly seems, as Mr. Gillan says, to be unfavourable. If sovereigns had established themselves in the currency, the effect should be cumulative. Year after year a certain amount of gold has passed into circulation, and if it stayed there we should expect a progression in the above figures. But of such progression there is no trace.

It may be added, with reference to the rapid flow of sovereigns to India in recent months (November, 1911, to February, 1912), that the greater number have been immediately tendered to Government in exchange for rupees or notes, the Government's holding of sovereigns in India having risen during these three months by no less than $6\frac{1}{2}$ millions sterling. The sovereigns have been remitted because as an exchange operation this has been the cheapest mode of obtaining currency, not because sovereigns rather than rupees or notes were in demand for financing the harvest. As Mr. Gillan has pointed out, the flow of sovereigns to India is dictated by exchange considerations without reference to the habits or wishes of the people. The important point is what happens to the sovereigns when they reach India. On the whole, it seems fair to say that there is at present no sufficient evidence for supposing that India has yet embarked upon the extravagant and ruinous habit of employing gold as the normal medium of circulation for the larger transactions.

J. M. KEYNES

Report on Condition of Women and Child Wage-earners in the United States (in 19 volumes). Vols. VI., VII., and VIII. (Washington : Government Printing Office. 1911.)

In compliance with an Act of Congress approved in 1907, a report is being prepared dealing with "the industrial, social,

moral, educational, and physical condition of woman and child workers in the United States wherever employed, with special reference to their age, hours of labour, term of employment, health, illiteracy, sanitary and other conditions surrounding their occupation, and the means employed for the protection of their health, persons, and morals."

The scope of the report is sufficiently wide, and it cannot be doubted, judging by the volumes which have been published, that it will be an extremely important document on the industries of the United States and one that will be invaluable to those engaged in similar research in other countries. Volumes relating to "Cotton Textile Industry," "Men's Ready-made Clothing Trade," "Glass Industry," "Silk Industry," "Metal Trades," "Laundries," "Women in Stores and Factories," are now completed. In addition, three volumes treating more especially of the various problems connected with child labour have now been issued, and will furnish the subject-matter of this review.

A certain unity of plan may be expected to pervade these numerous volumes, as they are all prepared under the direction of Mr. C. P. Neill, Commissioner of Labour, and under the immediate supervision of Mr. C. H. Verill. Experts have been appointed for the investigation of the different industries, and in most cases women are included among these special agents. Dr. Elizabeth Lewis Otey and Miss Mary Conyngton, and Special Agents Annie E. McCord and Edith Wilkinson are the chief contributors to the volumes on child labour. These deal with "The beginnings of child labour legislation in certain States," with "Conditions under which children leave school to go to work," and with "Juvenile delinquency and its relation to employment." They form volumes VI., VII., and VIII. of the series.

Volume VI. begins with a short sketch of the difficulties with which factory legislation was confronted in the various States, and points out that they are similar to the difficulties experienced in England, because "the early colonisers were the product of English seventeenth century intellectual and economic development, and had the same outlook on spiritual and material things that they left behind them in England." Thus, for instance, the statement that "idleness is the mother and root of all thefts, robberies, and evil acts and other mischiefs" was accepted as an axiom in America no less than in England, and doubtless helped to palliate the extensive employment of children in both countries. The comparative study of the history of factory legis-

lation furnished in this volume cannot fail to be very useful. We are given an exhaustive account of it prior to 1860 in the Northern States and from 1887 to 1909 in the Southern States. The final impression left on the reader's mind is that the methods of enforcing the law were, and still are, inadequate.

This account is brought up to date for all the States in chapter IV. of volume VII., where the factory legislation is treated in connection with its effect on the employment of children. A careful analysis is made of the reasons why the law is ineffectual, but sufficient stress does not seem to be laid on the fact that this is due in great measure to the scarcity of inspectors. One reads with surprise that Columbus and Columbia have no inspectors, that in Plymouth a school official declared the law "ineffective and outrageously evaded," and that in Columbia, according to a teacher in one of the mill schools, "the law was absolutely a dead letter."

In addition to this, volume VII. deals very fully with the "reason for leaving school to go to work" and the "circumstances possibly influential in causing children to leave school." These chapters are interesting both as furnishing an insight into the child's mind and into the forces that press the child into the labour market. In this connection it may be noted that "with many families, especially in Woonsocket, the reason for the child's leaving school to go to work was more negative than positive. It was not so much that there was a reason for his doing so, as that there was no reason for his not doing so." Evidently then the burden of the proof of the necessity of school must lie with the teachers, if they wish to retain their scholars. The section dealing with the "ambitions of children and their realisation" is distressing. "In more than two-thirds of the cases where the boys are intelligent enough to have a definite ambition, the work they are doing is in no way related to that ambition and affords no possibility of furthering it."

Volume VIII. may be regarded as an investigation into the truth or falsity of the maxim that "idleness is the root of all evil." On the whole, the evidence seems to show that work is prejudicial to a child's character, for the report finds that "working children furnish far more than their proportionate share to the group of juvenile delinquents, that this excess is found wherever they are studied, that it occurs in every age group, that it is not limited to any one offence, and that it cannot be adequately accounted for by parental condition, race, or character of home and home training." If, then, "working children are

far more likely to go wrong"—and this conclusion seems inevitable—"than those who can enjoy a childhood unburdened by adult responsibilities," it should surely be the aim of future legislation to raise the age at which children may go to work.

A connection having been established between work and delinquency, the causal relation between certain occupations and certain offences is next considered, and the result reached that the offences committed by girls are more closely connected with their work than those committed by boys. With girls, the percentage of "connection cases" was 40·1, while among boys it was 24·3. Domestic service for girls and the occupation as street vendors for boys proved to be the most harmful, accounting respectively for 48 out of the 81 crimes of the girls, and for 52 per cent. of the crimes committed by the boys.

There is much further information contained in these volumes which will undoubtedly be of value to those who are interested in child labour. The various problems raised are dealt with in an extremely thorough manner, and illustrated by abundant statistical evidence.

GLADYS M. BROUGHTON

Report of the National Monetary Commission of the United States. (Senate document, No. 243, 62-2.) (Washington : Government Printing Office. 1912. Pp. 72. \$0.10.)

THE National Monetary Commission appointed in May, 1908, as a direct consequence of the crisis of 1907, has now presented its Report to Congress, together with a draft bill embodying the Commission's recommendations. The Commissioners have already laid all students of banking under a great debt by the splendid series of monographs, descriptive of nearly all the banking systems of the world (with the curious exception of that of the United States itself, which is only treated historically), which have been published under their auspices. They now justify the labour and expense thus incurred by pointing out that "in examining the printed literature of banking at the beginning of their investigations, they were struck by the paucity, both in Europe and in America, of material dealing with other phases of the subject than the history of the circulation privilege. . . . It is a singular fact that most bankers, economists, and legislators who had written upon banking had discussed banking questions in much the same language and from much the same point of view as English authorities who debated banking reform in

England during the decades before the Act of 1844." This complaint is altogether justified. The literature in English of modern banking as opposed to that of the regulation of note issue has been almost non-existent.

The recommendations of the Commissioners are, of course, on the lines of the proposal already made public by their chairman, Senator Aldrich. The precise character of the National Reserve Association, which it is proposed to establish, depends so much upon matters of detail that it is difficult to summarise it here. But the main objects and provisions of the new scheme, as well as the principal defects of the existing system, are to be found in this Report expressed almost as succinctly as it is possible to express them.

J. M. KEYNES

Industrial Education in the United States. (Twenty-fifth Annual Report of the Commissioner of Labour, 1910.) (Washington : Government Printing Office. 1911. Pp. 822.)

THIS subject was dealt with in the annual reports of 1892 and 1902, but "during the last few years there has been such a marked growth of interest in industrial education that the Bureau undertook this study in response to an insistent demand."

Investigation Relative to Wages and Prices of Commodities.
4 vols. (Washington : Government Printing Office. 1911.)

THE Select Committee appointed by the United States Senate were of opinion that their inquiry could only be carried out properly by special agents. The Senate did not authorise this. The Committee now publish four volumes dealing respectively with :—Vol. 1, Report of Committee and Views of Minority ; Vol. 2, Hearings before Committee and Digest of Evidence ; Vol. 3, Wages and Prices in United States and Abroad ; Vol. 4, Wholesale and Retail Prices in United States and Abroad, and Index.

Report of the Commission of Corporations on the Tobacco Industry. Part II., Capitalisation, Investment, and Earnings. (Washington : Government Printing Office. 1911. Pp. xxi + 343.)

Le minimum de salaire et les administrations publiques en Belgique. (Bruxelles : Office du Travail. 1911. Pp. 206.)

THIS document describes the arrangements of the Government for applying the principle of a minimum wage. After

giving a short history of the development of the idea in Belgium, and discussing the definition and application of the term, the author deals with the difficulties encountered in establishing the principle, and the arguments for and against it as given in evidence before the Commissioners. Then follows a consideration of the questions, by whom and on what basis the amount should be fixed, and where the boundary-line should be drawn between town and country workers. The methods followed by each commune, and the work of the *Députation permanente*, are described. Chapters iv. and v. contain tables showing the population of each commune and the dates of the different stages in the development of the application of the minimum-wage principle. Chapter vi. gives tables showing the date of its adoption and the gradual rise in the amount of the wage, and the conclusion shows the arrangements for preventing the evasion and punishing the infringement of the principle. A useful document, and not difficult for foreigners, although those accustomed to the papers of the French Government will find many new terms applied.

AGNES DAWSON

Report on Industrial and Co-operative Societies in the United Kingdom. [Cd. 6045.] 1912. Price 1s. 8d.

THIS Report and the Statistical Tables revise and extend for the decade 1900-1910 the volume [Cd. 698] issued by the Labour Department of the Board of Trade in 1901.

Statistical Statement with regard to Work of the Board of Trade Labour Exchanges. [Cd. 5955.] 1911. Price 2d.

FOR the period covered by this statement (January to September, 1911) a new method of counting applications has been adopted.

Accounts of Expenditure of Wage-earning Women and Girls. [Cd. 5963.] 1911. Price 5d.

TABULATED results of thirty complete accounts for one year received through certain unofficial organisations.

OBITUARY.—GUSTAVE DE MOLINARI.

GUSTAVE DE MOLINARI was born on March 3rd, 1819, at Liège. His father, who had been a field officer in the Imperial

Army, had settled in that town, where he practised as a physician. He died on January 28th, 1912.

M. de Molinari's active life may be divided into four periods. Towards 1840 he came to Paris filled with the spirit of economic propagandism. He voiced his ideas in papers of various political shades. He had, moreover, prescience regarding the transformation which would be effected throughout the world thanks to trans-oceanic steam navigation and the development of railways. In 1843 he published his celebrated article on *The Future of Railroads*, in which he not only showed how they would enlarge the markets, draw producer and consumer closer together, render prices uniform by raising them at the producing point and lowering them at the consuming point, but how they would also modify working conditions, mobilising labour, allowing workmen to move about and respond to the demand for their services. He showed the necessity of commercialising labour, and proposed the foundation of *Bourses du Travail* (Labour Exchanges), which would be for labour what Exchanges are for goods and securities. The actual creation of the *Bourses du Travail* in France was a crazy deviation from a just idea. The Labour Exchanges founded in Great Britain are nearer the original conception.

M. de Molinari realised that scientific and industrial progress would be hindered, limited, more or less annihilated by Protectionism and Socialism. To his mind they both represented mere survivals of the past, a spirit of monopoly, of commercial jealousy, of exclusivism, the old conception that no man can gain except at the expense of another, the passion not so much for action as for preventing others from acting, the old tradition of acquisition by capture, of replacing economic competition by political competition, putting public authority at the service of such and such a private interest.

He was present at the first meeting of the *Société d'Economie Politique* in 1842. In 1846, he took part in the foundation of the Association for Freedom of Exchange. He then published a little volume entitled *L'Organisation de la liberté industrielle et l'abolition de l'esclavage*, and the following year another book, bearing as title *Histoire du tarif: les fers, les houilles, les céréales*.

The Revolution of 1848 had been directed against the 220,000 voters who formed the *regal* country under Louis Philippe. The leaders of the Revolution should have brought their economic policy into harmony with universal suffrage. They did nothing of the sort. They remained Protectionists. Independent economists like M. de Molinari were attacked both by the

Conservatives of the *status quo* and by the Socialists, who treated them as enemies. M. de Molinari in 1849 published his book, *Les Soirées de la rue Saint Lazare*, in defence of individual property. Carried away by his sense of logic, he went to extremes in his opposition to all State intervention.

The second period of M. de Molinari's life commenced in 1852 and continued until about 1860. He considered that there was no place in France, after the *Coup d'État* of December 2nd, 1851, and the reign of oppression and silence which followed, for a man of independent and audacious spirit like himself. He therefore returned to Belgium. His countrymen were well inspired to found for him a chair of Political Economy at the Royal Brussels Museum of Belgian Industry; to this was added later another Chair at the celebrated *Institut Supérieur du Commerce* of Antwerp, from which so many eminent men have risen. That period of his life may be termed the professorial period.

Towards 1860 he returned to Paris, and in 1867 entered the office of the *Journal des Débats*, of which he became editor under the directorship of M. Bapst (1871 to 1876). He remained in Paris during the war of 1870 and the Commune. He was not unwilling to attend popular meetings opened after the law of June 6th, 1868, to gauge public opinion; and he summed them up in two volumes, which are masterpieces of careful analysis: *Le Mouvement Socialiste et les Réunions Publiques avant la Révolution du 4 Septembre, 1870*; *Les Clubs Rouges pendant le Siège de Paris*.

M. de Molinari travelled a good deal. Among other journeys he undertook one to Russia in 1860, whence he brought back a curious and vividly written book. While he was at the *Journal des Débats*, also, he made several journeys, and repeated them between 1876 and 1881.

The fourth period of M. de Molinari's life began at the end of 1881. M. Guillaumin, the celebrated economist bookseller, founded the *Journal des Économistes* in December, 1841. He entrusted its editorial management to M. Joseph Garnier, who retained it until his death on September 25th, 1881. M. de Molinari succeeded, and devoted his life until November, 1909, to the direction of that publication which, without servility, represents the traditions of classical Economists. To this periodical he brought his great experience, his widespread knowledge, his talent as a writer, and he was able to group around it contributors whom he animated with his own zeal and enthusiasm, and of

whom he made real friends. I am deeply grateful to him for having indicated me to M. F. Alcan as his successor.

M. de Molinari had a very true and penetrating perception of events. He applied his remarkable powers of observation to mankind, and if in ordinary life his judgments were drawn with kindly indulgence, yet he was not easy to deceive. He knew how to express his thoughts and impressions with great precision, and his narratives of journeys in Russia, in the United States, in Canada, in Ireland, across Europe, are attractive, enjoyable, and instructive reading, with a dash of humour quite peculiar to him.

M. de Molinari believed that the writer's task is to spare the reader any effort, by giving him a task already completed. He eliminated everything that could hinder; he simplified facts, and only presented the essentials. He clarified and filtered his thought in such a manner as to give it every possible limpidity. By the elegance of his literary style, his strength and delicacy of expression, the appositeness of all terms employed, M. de Molinari is one of the masters of the French language.

M. de Molinari belonged to what philanthropists and sentimental socialists call the "stern" school, as though science could have any other purpose than that of seeking after truth. As a man he was tender-hearted. His friends quote numerous proofs of his kindness, shown not in words alone, but by discreet actions.

Of medium height, with abundant hair, short-sighted, but able to read without spectacles, wearing a moustache and *impériale*, with only a slight hardness of hearing, he remained until quite lately physically fit and intellectually vigorous to such an extent as to excite the admiration of all who saw him. Struck down by hemiplegia, he had retained all his lucidity of mind, and when death sought him out, he was still pondering over the great questions which had filled his life, and their relations to contemporaneous events. He died at Adinkerque, where he had stayed on in a little spot near the sea, after spending some time at La Panne when he had found the air to suit him. He was interred in the family grave, at Père Lachaise cemetery, Paris.

M. de Molinari had but one preoccupation: the pursuit of truth. He never subordinated truth to considerations of success. He never upheld an opinion for the sake of pleasing such or such a person. That is not, perhaps, the best means of attaining success, but in any case it affords the satisfaction of independence, above all palinodes, beyond all fears of recrimination or reproach.

M. de Molinari's share in the economic movement of the nineteenth century and the commencement of the twentieth was too extensive for it to be possible to expound it in the restricted space of which I can dispose here. But I would recommend all to read his book, *Les Problèmes du XX^e Siècle*, which was published in 1901, and also *L'Économie de l'Histoire, Théorie du Progrès*, which appeared in 1908.

M. de Molinari was, above all, an economist, and he made everything converge toward economic questions. Liberty and property, he said, are related to the economic phenomena of value. Value is the object of liberty and the substance of property. Man can only usefully use his liberty to create value, and value only can he possess.

He knew how to find impressive and profound formulæ which grafted themselves on one's memory, as, for instance, "An interest can only be vanquished by a stronger interest." And it was in the following words that he characterised the true and only indisputable attribute of State: "The duty of the State is *de maintenir le milieu libre* (to maintain general freedom)."

Last July the *Société d'Économie Politique* lost its President, M. Emile Levasseur; in the person of M. G. de Molinari it now loses its honorary president. These two deaths have been deeply felt by all its members, filled with admiration and respectful sympathy towards those two distinguished men.

YVES GUYOT

CURRENT TOPICS.

THIS is the first number of the ECONOMIC JOURNAL which has not appeared under the editorship of Professor F. Y. Edgeworth. The Journal in its present form is virtually his creation; and its present position among economists his achievement. The new Editor wishes to take this opportunity of saying that it is his intention to follow so far as he can the existing tradition. It is laid down in the preamble to the constitution of the Society that the Journal is intended to represent all shades of economic opinion and to be the organ of all schools. The new Editor will seek to pursue not only Professor Edgeworth's impartiality, but also the method by which he has happily blended the work of academic economists with contributions from non-academic sources.

THE second Economic Congress arranged by the Society was held in London on the 10th and 11th of January at the London

School of Economics. On the first day Lord Macdonell presided over the discussion of the financial relations of Ireland with Great Britain. Despite differences on various minor issues, the papers read were unanimous in their support of Irish fiscal autonomy with a separate Irish customs department. Certain difficulties inherent in this policy, perhaps inadequately treated in the papers, were well presented in discussion. It is unnecessary to refer in detail either to the contents of the papers or the trend of the discussion, as the Council have caused the proceedings of the Congress to be printed and distributed to Fellows. The question of the "State in Relation to Railways" was discussed on the second day, when, owing to the unavoidable absence of Lord George Hamilton, Mr. W. M. Acworth presided. The papers read were of exceptional interest, in that the experience of the principal Continental countries having a system of State Railways was presented by authorities from each of the countries in question.

On the evening of the 10th of January there was a dinner at the Hotel Cecil, at which the Fellows of the Society had an opportunity of entertaining the visitors who had so generously contributed papers for discussion. It is to be hoped that the Society will be enabled periodically to arrange for the recurrence of meetings similar to the Congress that has just been held. The number of Fellows of the Society present was disappointing, but the interest shown in the proceedings by others than Fellows sufficiently proves that the Society is rendering a service to Economic Science in promoting the scientific discussion by eminent authorities of questions of first-rate importance. The Proceedings of the Congress have been separately published in two volumes containing the papers on "Irish Finance" and "The State in Relation to Railways" respectively. The volumes may be obtained, price 1s. 6d. each, either from Messrs. P. S. King and Co., Great Smith Street, Westminster, or upon application to the Secretary at 9 Adelphi Terrace, Strand.

OUR Danish correspondent, Professor Harald Westergaard, writes as follows with reference to the death of Professor H. W. Scharling, and to the appointment of his successor in the chair of Political Economy at Copenhagen:—The well-known Danish economist H. W. Scharling, who died last year, held the chair of Political Economy in the University of Copenhagen for more than forty years, with a short interruption, 1900-1901, when he

was Minister of Finance. He was the author of several books dealing, amongst other subjects, with banking, with commercial policy, and with the theory of value, and some years before his death he planned a great systematic work on political economy, of which he succeeded in publishing three volumes. His successor, Dr. Axel Nielsen, was appointed to the chair on the 20th December, 1911. Dr. Nielsen, who was born in 1881, has a good name as author of several thorough-going investigations especially on economic history, on the history of prices in Denmark, and on Danish currency in the eighteenth century. The Faculty of Law at the University of Copenhagen includes at the present time four teachers of political economy and statistics. The law-students must pass an examination in political economy, and there is, in addition, a separate examination for students of economics (comprising also statistics, history, and law), requiring on an average five years' study. For those who wish to qualify themselves for a scientific career, there was established in 1902 the degree of Doctor in Political Economy. Seven young men have won this degree since that time (by writing a book, which must receive the approval of the Faculty); on his forty years' jubilee Scharling was created *doctor politices honoris causa*. Statistics are taught theoretically and practically, the Faculty of Law having a so-called statistical laboratory, with a compulsory course, extending over two semesters, for all students of economics.

WITH the first issue for 1912, Dr. Conrad has given up the editorship of the *Jahrbücher für Nationalökonomie und Statistik*, although his name still appears in the customary place upon the cover. Dr. Conrad assumed the joint editorship, of what has become known all over the world as Conrad's *Jahrbücher*, in 1872, and has thus ruled over one of the most celebrated of economic journals for no less than forty years. The current number of the *Jahrbücher* contains a fine reproduction of a bust of Dr. Conrad by M. Kruse. The Fellows of the Royal Economic Society will wish to Dr. Conrad many years of further activity to the honour and advancement of German learning.

THE industrial unrest to which it has been necessary to direct attention in these notes in recent issues continues, the uncertainty of the moment focussing upon the conditions prevailing among large numbers of miners throughout the country. Among these workers, representing one of the most highly organised

sections of labour, the various stages of negotiation, ballot, the issue of notices to cease work, sectional conferences, again negotiations, and finally the intervention of the Industrial Council and of the Government, have been gone through. The outcome, whether strike, postponement, or settlement, is at the moment (February 25th) uncertain, and the detailed conditions laid down by one side or the other are probably destined to display a fluidity which makes their enumeration unnecessary. But it is desirable to note one or two of the essential features that lie at the root of the great industrial struggle upon which the country may be entering.

THE demand of outstanding importance put forward by the men is for the recognition of a minimum wage for all miners, that is, for all getters of coal working at the face, and the rates claimed range from 4s. 11d. per day to 7s. 6d., according to district. • Over a large area (South Wales being an important exception) the principle of the minimum wage has been conceded by mine owners, but this step has been accompanied by conditions aiming in general at the interpretation of any rates, that may be fixed, in terms of output, including as far as possible those cases in which an allowance for the difficulties of abnormal places has to be made.

IN some degree the claims of the miners for a minimum wage fall in with a view that is being widely accepted—namely, that it is desirable in the interests of the community that for a large section of the population earnings should, if possible, be less weighted by the burden of uncertainty and by excessive inequalities of competition. As a body, however, it is not felt that the miners, although their work is arduous, rank among the more underpaid classes of the community, and the feeling is widely spread that such strength as they manifest is due not so much to the economic justice of their particular claim as to the extent and strength of their organisation (although these are somewhat unequally distributed) and to the dependence of almost the whole community upon their output.

FROM other points of view also their claim is failing to elicit general support. An organisation for protective purposes, be it of employers or employed, can only appeal successfully to public opinion if its claims are well founded and its corporate loyalty above reproach. In the latter respect many of the miners of South Wales have to be classed with those other sections of wage-

earners who have been weakening of late instead of upholding the principle of collective bargaining; and the perceptible weakening at the present moment of the sense, that bargains entered into between employers and employed are likely to be as rigorously observed as in the past, is matter for regret. This is a source of weakness in negotiation which it is to be trusted the future will eradicate. But at the moment it is an obstacle to success, and of this fact the proposal recently put forward by Mr. D. A. Thomas for the insertion in any future agreement of a penalty clause, providing for a heavy money forfeiture in case of default by either side, is a sign.

WHILE among the miners the question of the minimum wage is uppermost, in other directions the difficulty arising from the attitude of trade unionists towards non-unionist labour has been conspicuous, the most notable instance having been found among cotton weavers. A minor illustration of the difficulty arising from the desire, when an opportunity offers, to coerce the non-unionist either into membership or into the abandonment of his calling, has been illustrated in the recent stoppage among the dock labourers at Tilbury. It would appear that in various directions the trade unions in England are obtaining even more advantageous conditions of preferential employment than those frequently conceded by the legal tribunals established under the Industrial Arbitration Act of Australia and New Zealand, a preference for which, under present conditions, there is much to be said if the powers which it confers are exercised reasonably and if the responsibilities it creates are loyally and frankly met.

AMID the matters of industrial controversy which at the moment are assuming the greatest prominence, it is satisfactory to note that two questions of fundamental importance appear to be forcing their way into the public mind—one the possibilities and claims of industrial co-partnership, and the other the necessity for exercising greater care alike in the placing and the training of juvenile labour, and especially in avoiding the dangers of immediate employment that may imperil the future. The question has been attracting special attention in connection with boy labour employed in the Post Office, and simultaneously a considerable literature is bearing witness to the importance attached to a question that, if ignored, only means that, at the moment when industrial life is being entered upon, large numbers are starting under conditions that in a few years will tend to renew in their cases the problems of casual labour and of unemployment.

IN the case of a second trade scheduled under the Trade Boards Act, minimum rates have now been made obligatory by the Board of Trade, this step having been recently taken in connection with the determination made by the Board established in certain branches of the lace-finishing trade. The time rate, thus made a new legal minimum, is 2½d. per hour.

THE unemployment chart of the Board of Trade showed 2·7 per cent. unemployed at the end of January for the members of the trade unions making returns, this figure being something over 1 per cent. lower than had been previously reached for the same month during the decade 1902-11.

IN the last number of this Journal allusion was made to the project of an International Commission on the Cost of Living, which has been advocated by Professors Bauer and Irving Fisher. Professor Fisher has now been successful in interesting President Taft in the project. In his Message to Congress of February 2nd, 1912, the President recommends that foreign countries be invited to co-operate for such a purpose, and a Bill has been drafted for carrying this recommendation into effect. The following is an extract from the President's Message:—

“There has been a strong movement among economists, business men, and others interested in economic investigation to secure the appointment of an international commission to look into the cause for the high prices of the necessities of life. There is no doubt but that a commission could be appointed of such unprejudiced and impartial persons, experts in investigation of economic facts, that a great deal of very valuable light could be shed upon the reasons for the high prices that have so distressed the people of the world, and information given upon which action might be taken to reduce the cost of living. For some ten years past the high and steadily increasing cost of living has been a matter of such grave public concern that I deem it of great public interest that an international conference be proposed at this time for the purpose of preparing plans, to be submitted to the various Governments, for an international inquiry into the high cost of living, its extent, causes, effects, and possible remedies. I therefore recommend that, to enable the President to invite foreign Governments to such a conference, to be held at Washington or elsewhere, the Congress provide an appropriation, not to exceed \$20,000, to defray the expenses of preparation and of participation by the United States.”

RECENT PERIODICALS AND NEW BOOKS.

The Economic Review.

- JANUARY, 1912. *The Japanese Government and Sugar.* J. C. PRINGLE. *The Story of a Children's Care Committee.* HENRY ISELIN.

The Statistical Journal.

- DECEMBER, 1911. *The Course of Prices at Home and Abroad, 1890-1910.* R. H. HOOKER. Various index numbers for the United Kingdom, France, Germany, and America, are reduced, for purposes of comparison, to a common basis (the ten-year average 1890-99), and the degree of general similarity in the movement of prices is displayed. Movements in the prices of food and of material, in retail prices and wholesale prices, and in prices and wages are then compared, and the paper concludes with some discussion of the influence of gold production upon these movements. *International Statistical Institute.* A full account of the sessions held at The Hague in September, 1911. *The Measurement of the Accuracy of an Average.* A. L. BOWLEY. In amplification of an article in the same Journal of December, 1897, with bearing upon the problem of the effects of errors in weighting on index numbers.
- JANUARY, 1912. *The Economic Position of Scotland and her Financial Relations with England and Ireland.* EDGAR CRAMMOND.
- FEBRUARY, 1912. *The Recruiting of the Employing Classes from the Ranks of the Wage-earners in the Cotton Industry.* S. J. CHAPMAN and F. J. MARQUIS. *The Statistics of South Africa.* H. E. S. FREMANTLE.

Journal of the Institute of Bankers.

- NOVEMBER, 1911. *The Establishment and Growth of Foreign Branch Banks in London.* W. F. SPALDING. An essay, to which the Institute have awarded a prize, which gives an excellent account of the main relevant facts, so far as they are ascertainable.

Bankers' Magazine.

- FEBRUARY, 1912. *Savings Bank Statistics.* A. H. GIBSON. The first of a series of articles in which "it is proposed to illustrate the various economic laws in operation in connection with Savings Bank statistics."

Transactions of the Manchester Statistical Society.

SESSION, 1910-1911. *The Economics of the Existing (or of any) Poor Law.* SIDNEY WEBB. *Industrial Accidents.* H. VERNEY. *The Yield of High-Class Investments, 1896-1910.* A. W. FLUX. The rate of interest on high-class municipal securities is shown to have risen from £2 17s. per cent. at the end of 1897 to just over £3 12s. per cent. at the end of 1910. English railway debenture yields were about 2s. 6d. per cent. lower than municipal yields in 1897, but about 5s. per cent. higher in 1910.

• *Clare Market Review.*

FEBRUARY, 1912. *National Insurance and Some Allied Problems.*

The Women's Industrial News.

JANUARY, 1912. *Juvenile Employment Exchanges.* MRS. OGILVIE GORDON. *Seamen's Allotment Notes.* MISS L. KLINGENSTEIN.

• *The Housing Reformer* (Cardiff).

DECEMBER, 1911. This new monthly is published (price 1d.) by Mr. H. Stanley Jevons, at 4 Park Place, Cardiff, in the interests of better housing conditions in South Wales and Monmouthshire.

The Quarterly Journal of Economics (Boston).

NOVEMBER, 1911. *The United States Leather Company and its Reorganisation.* A. S. DEWING. *The Commission House in Latin American Trade.* W. C. DOWNS.

FEBRUARY, 1912. *Beet Sugar and the Tariff.* F. W. TAUSSIG. *The Recent Rise in the Price of Silver and some of its Monetary Consequences.* E. W. KEMMERER. A substantial article (60 pp.), with special reference to the Philippines and Mexico, summarising the available information, but not adding a great deal to it. *The British National Insurance Act.* R. F. FOERSTER. *The Income of Capital.* G. A. KLEENE. A theoretical study of current doctrines. *The First Decade of the Swiss Federal Railways.* A. N. HOLCOMBE.

• *The American Economic Review* (Boston).

DECEMBER, 1911. *The Federal Corporation Tax.* MAURICE H. ROBINSON. An account of the tax which became law in 1909, as a substitute for the unconstitutional income tax, and which, "in form an excise tax on the privilege of conducting business under the corporate charter, is in fact an income tax on corporate net earnings." The article also contains very valuable figures, now available for the first time, showing in five group totals the capital and income of the 262,490 corporations of the United States. *Cost and its Significance.* H. J. DAVENPORT. An interesting contribution to the theory of value. *Immigration and Crises.* H. P. FAIRCHILD. *Recent Efforts to Advance Freight Rates.* M. B. HAMMOND. An account of the recent important decisions of the Interstate Commerce Commission.

Political Science Quarterly (New York).

- DECEMBER, 1911. *The Recent Trust Decisions.* H. R. SEAGER.
Economic Aspects of Immigration. I. A. HOUSWICH. *The Marketing of Wheat.* JAMES MAVOR. *The Letters of John Stuart Mill.* J. H. HOLLANDER.

Annals of American Academy (Philadelphia).

- JANUARY, 1912. *China: Social and Economic Conditions.* A series of papers dealing more with social than with economic conditions.

The Journal of Political Economy (Chicago).

- DECEMBER, 1911, and JANUARY, 1912. These two numbers contain ten articles by Professors Kemmerer, Sprague, and Kinley, Mr. A. Piatt Andrews, and others, on *Banking and Currency Reform in the United States.*
- FEBRUARY, 1912. *A National Reserve Association and the Movement of Cotton in the South.* J. L. LAUGHLIN. *Seminar Methods of Economic Instruction: A Symposium.* E. R. A. SELIGMAN, F. W. TAUSSIG, J. L. LAUGHLIN, and J. H. HOLLANDER. Papers read at the Second Conference on the Teaching of Economics, Chicago, 1911,—of deep interest to all teachers of advanced economics.

Proceedings of the Western Economic Society (Chicago).

- AUGUST, 1911. *Reciprocity with Canada.* A report of the proceedings at the first meeting of this newly formed Society, held at Chicago, June 3rd, 1911, in which Professors Taussig, Kinley, Laughlin, and others, took a part. It is expected that the Society will hold four meetings, each devoted to some single topic, in each year.

Journal des Economistes (Paris).

- DECEMBER, 1911. *Notes sur les Rapports de la Commission du Budget.* YVES GUYOT.
- JANUARY, 1912. *Le Marché financier en 1911.* ARTHUR RAFFALOVICH.
- FEBRUARY, 1912. *M. G. de Molinari.* YVES GUYOT. *Les Industries françaises au début du XX^e Siècle:—L'Industrie Cotonnière.* G. PATUREL.

Revue d'Economie Politique (Paris).

- NOVEMBER–DECEMBER, 1911. *La Mesure idéale de la Valeur.* A. BUDON. *Les Coopératives de gros d'Angleterre et d'Ecosse (1897–1909.)* M^{lle}. A.-S. LEVETUS.
- JANUARY–FEBRUARY, 1912. *Les Enseignements de quelques Grèves récentes.* P. PIC. *Le Reppeuplement des Campagnes: Essais législatifs.* E. SCHWIEDLAND. *La Régularisation de l'Approvisionnement cotonnier: l'Entente des Consommateurs.* W. QUALID.

L'Economiste Français (Paris).

DECEMBER 23, 1911. *Les Contributions indirects en Russie*. A. RAFFALOVICH. The receipts of the Russian budget are derived to the extent of 35.7 per cent. from taxes, and to the extent of 59.8 per cent. from State lands and State industries (4.5 per cent. coming from other sources). Official publications, issued on the occasion of the Turin Exhibition, enable M. Raffalovich to give an account of some of the indirect contributions of Russian consumers to the Exchequer.

DECEMBER 30, 1911. *Les Chemins de Fer de l'Etat Français*. PIERRE LEROY-BEAULIEU. A dark picture, for the completion of which reference is made to an article on the State Railways, by M. Paul Leroy-Beaulieu. The great increase of the "coefficient of exploitation" on the "Ouest" lines is due to useless "paper-asserie," and to the superfluity of officials, a consequence of "courtisanerie electorale."

FEBRUARY 3 and 10, 1912. *Le Mouvement des Successions en France*. PAUL LEROY-BEAULIEU.

FEBRUARY 24, 1912. *La Concurrence des divers Fonds publics entre eux et la prochain émission d'obligations des Chemins de Fer de l'Etat*. PAUL LEROY-BEAULIEU.

Bulletin de la Statistique Générale de la France (Paris).

OCTOBER, 1911. *Le mouvement des prix et l'activité productrice*. L. MARCH.

JANUARY, 1912. *Mouvements du commerce et du crédit, mouvement ouvrier en relation avec le mouvement des prix*. L. MARCH.

These are the first two issues of a new quarterly published by the *Conseil de la Statistique Générale de la France*. It will publish and summarise the principal statistics of population, families, prices, wages, industry, and so forth, and will pay special attention to the development of local statistics. The two articles by M. Lucien March, referred to above, constitute a very important study, enriched with numerous diagrams, of the comparative statistics for France, England, Germany, United States, and Belgium of prices, and of various other indexes of financial and commercial activity.

Revue Economique Internationale (Brussels).

DECEMBER, 1911. A series of articles on the economic conditions of South Africa, written for the most part by Englishmen resident there.

JANUARY, 1912. *L'Activité Economique de l'Angleterre Radicale* (1905-1911). J. BARDOUX. *Les Cartels dans la Navigation libre—la Baltic and White Sea Conference*. A. HAAS. *La Réforme de l'Education technique en France*. G. RENARD. *Le Projet douanier Néerlandais*. H. SMISSAERT.

Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft (Leipzig).

PART 4, 1911. *Das kommunale Leben der modernen Grossstadt*. P. FUSS. *Psychologie der Arbeit*. E. BISCHOFF. An interesting article, containing several examples of "work-curies." *Eine*

Revolution in der Baumwollgewinnung? E. SCHULTZE-GROSSBORSTEL. Discusses the possibility of a fifteenfold increase in the production of cotton. *Die gelbe Arbeiterbewegung.* C. HEISS. An account of organisations of working men which, from the standpoint of the essential harmony of interests between capital and labour, set themselves to oppose organisations which work from the opposite standpoint. *Malthus, Ricardo und die Erneuerung der Wissenschaft in Deutschland.* W. KÖHLER.

Jahrbücher für Nationalökonomie (Jena).

DECEMBER, 1911. *Oeffentliche Hypothekenbanken und Pfandbrief-institute vom Standpunkt der Wohnungsfrage.* F. PABST. *Betrachtungen zu dem Entwurf eines Bodenentschuldungsgesetzes in Oesterreich.* TH. BRZESKI.

JANUARY-FEBRUARY, 1912. *Vergleichende Untersuchungen über die Geschäftsentwicklung der Reichsbank.* W. LEXIS. *Die englische Genossenschaftsrecht.* E. LOENING. *National-ökonomie und Handelsbetriebslehre.* K. DIEHL. *Die Grundherrschaft in England: ein Beitrag zur vergleichenden Wirtschaftsgeschichte.* G. BRODNITZ. A study of medieval English economic history, with very numerous references to Maitland and Vinogradoff. *Die Werturteile in der Nationalökonomie.* A. HESSE. *Der sozialpolitische Gehalt von Smith's Untersuchung und Ricardo's Grundsätzen.* H. GEHRIG.

Annalen für Soziale Politik und Gesetzgebung (Berlin).

VOL. 1, PARTS 4 AND 5, 1912. *Preissteigerung und Reallohnpolitik.* STEPHAN BAUER u. IRVING FISHER. A discussion of the facts, leading up to advocacy of the proposed International Commission on the Cost of Living. *Die Zukunft in America.* (70 pp.) J. PLENGE. *Das deutsche Versicherungsgesetz für Angestellte.* A. GÜNTHER. *Die gesetzliche Regelung des Arbeitsnachweises in Österreich.* E. MISCHLER. *Die Aufgaben der Gross-Berliner Wohnungspolitik.* R. KUCZYNSKI.

Archiv für Sozialwissenschaft (Tübingen).

PART 3, 1911. *Ueber Werturteile in der Volkswirtschaftslehre.* PROF. L. BRENTANO. *Die Nachfrage auf dem Arbeitsmarkte.* PROF. R. SCHÜLLER. *Betrachtungen über Methoden und Ergebnisse der deutschen Arbeitsmarktstatistik.* Dr. R. MEERWARTH. This article is continued in Part 1 of 1912.

PART 1, 1912. *Die Entstehung des Preises aus subjektiven Wertschätzungen* (54 pp.). PROF. R. LIEFMANN. The first of two articles in which Professor Liefmann proposes to lay the foundations of a new theory of Value. He begins with criticisms first, of the conception of Price or Exchange Value as the objective quantity of other commodities exchangeable for a given commodity, and secondly, of the doctrine, in its orthodox form, of Marginal Utility. *Das französische Gewerkschafts- und Streikrecht.* PAUL LOUIS.

Zeitschrift für die Gesamte Staatswissenschaft (Tübingen).

PART 4, 1911. *Kritische Studien zur Systematisierung der Staatsfunktion.* B. BEYER. Concluding article. *Wirtschafts-*

wissenschaft und Wirtschaftspolitik. G. COHN. 'The third of a series of articles.'

PART 1, 1912. *Das Kreditgeld.* HAFNER. *Der englische Sonntag und die Volksbildung.* E. SCHULTZE.

Zeitschrift für Socialwissenschaft (Leipzig).

JANUARY, 1912. *Wesen und Zweck der Kapitalanlage im Auslande, I.* P. ARNDT. *Der gegenwärtige Stand der Kartellfrage in der deutschen Eisenindustrie, I.* F. DIEPENHORST.

Zeitschrift für Volkswirtschaft, Sozialpolitik und Verwaltung (Vienna).

PART 6, 1911. *Zur Frage der Bewertung der wirtschaftlichen Güter.* PROF. A. BILIMOWITSCH. An elaborate study of the theory of Value treated by a method somewhat different from the ordinary. *Böhm-Bawerks Kritik der sozialistischen Zinstheorie.* DR. OTTO CONRAD.

PART 1, 1912. *Die Handelspolitik und Handelsbilanz Oesterreich-Ungarns.* R. SCHÜLLER. *Die theoretische Grundlage des Marxschen Systems im "Kapital."* A. GERHARD. *Ueber Gemeindesteuern in Deutschland und in Oesterreich.* P. GRÜNWALD.

Giornale degli Economisti (Rome).

JUNE, 1911.¹ *I Sindacati d'imprenditori nella Navigazione.* E. ANZILOTTI. *I Salarii di mestieri in terra di Bari dal 1449 al 1732.* L. MASSA. *La Questione delle Trebbiatrici a Ravenna.* A. CARONCINI. Continued from the March number. *La determinazione dei Valori d'Importazione e d'Esportazione.* C. OTTO LENGHI.

JULY. *I Sindacati d'imprenditori nella Navigazione.* E. ANZILOTTI. *Il Calcolo della ricchezza privata.* L. PRINCIVALLE. A continuation of the controversy with Prof. Benini on the proper coefficient for determining the amount of a country's wealth from the amount of its yearly successions.

AUGUST. *I concepimenti antenuziali.* G. MORTARA. Statistics of births in several civilised countries, showing to what extent the ceremony of marriage has been anticipated. *La teoria matematica del monopolio.* L. AMOROSO. A re-statement of Cournot's theory is accompanied by new geometrical illustrations of the determination of value under monopoly, and of the indeterminateness of "duopoly."

SEPTEMBER. *I Sindacati d'imprenditori.* E. ANZILOTTI. Continued from the July number. *L'ultima fase della industria della potassa in Germania.* A. CARONANI. *Il Calcolo della ricchezza.* L. PRINCIVALLE. Continued from the July number.

OCTOBER. *Le condizioni e risultati finanziari dell'esercizio ferroviario di Stato, I.* L. AMOROSO. After describing the environment—protectionism, the "Byzantinism of public life in Italy," &c.—the writer goes on to the finance of the State railways. *Sul concetto di patrimonio.* G. DE F. GERBINO. *La politica doganale degli stati italiani dal 1815 al 1860.* R. B. D'AJANO.

¹ This and the four numbers following were not received until December, 1911.

NOVEMBER, 1911. *Le condizioni e i risultati finanziari dell' esercizio ferroviario di Stato.* L. AMOROSO. Continued from October. *La politica doganale degli Stati Italiani dal 1815 al 1860.* R. BROGLIO D'AJANO. Continued from October. *Il problema economico dell' emigrazione Italiana.* G. REZIOSI. *Economia Matematica ed economia statistico-induttiva.* R. A. MURRAY. The methods of Benini and other leaders—l'indirizzo Marshalliano and l'indirizzo Paretiano—are characterised.

La Riforma Sociale (Turin).

DECEMBER, 1911. *A proposito della Tripolitania.* E. GIRETTI e LUIGI EINAUDI. The first writer, referring to Professor Einaudi's article in a former number, rejects a justification of the war, based on the supposition of a purely ideal altruism and far-sightedness. Prof. Einaudi's reply strikingly portrays the economic aspects of conquest. *I prezzi delle Merci in Italia nel 1910.* ACHILLE NECCO. A continuation of index-numbers, based on Italian exports and imports; compared with English, French, and German figures—almost all showing advance since 1901.

JANUARY-FEBRUARY, 1912. This number includes, among many papers of special interest to Italian economists, a discussion of the fiscal problem in Turin, by G. PRATO, and a description of the trade and industry of Tripoli, by G. BORGATTA. The Supplement includes a study on the American Cotton Exchanges, showing the inexpediency of restricting speculation, by G. PRATO. The properties of the Weighted Arithmetic Mean—*c.g.*, the possibility of its increasing while all its constituents decrease—are contributed by U. RICCI.

NEW BOOKS.

BOSANQUET (MRS. BERNARD), Edited by. *Social Conditions in Provincial Towns.* (First Series.) London: Macmillan. 1912. Pp. iii+82. 1s. net.

[Portsmouth, Worcester, Cambridge, Liverpool, Edinburgh, Oxford, Leeds. Reviewed above.]

BRASSEY (EARL). *Sixty Years of Progress and Fiscal Policy.* London: Free Trade Union. 1911. Pp. 125. 1s.

[A revised edition of the volume published in 1906.]

CANNAN (PROF. EDWIN). *The History of Local Rates in England in relation to the proper distribution of the burden of taxation.* Second Edition, much enlarged. London: P. S. King. 1912. Pp. xiv+215. 3s. 6d. net.

["The whole of the first edition of this book, published in 1896, with few exceptions . . ., reappears in the first five chapters of the present edition." The three chapters following are new. To be reviewed.]

CARLILE (W. W.). *Monetary Economics.* London: Edward Arnold. 1912. Pp. xii+307. 10s. 6d. net.

[To be reviewed.]

CARR (A. S. COMYNS), GARNETT (W. H. STUART), and TAYLOR (J. H.). *National Insurance.* London: Macmillan. 1912. Pp. xxx+504. 6s. net.

[A precise and lucid explanation of the provisions of the National Insurance Act (1911), with a Preface by Mr. Lloyd George. To be reviewed.]

GONNER (E. C. K.). *Common Land and Inclosure*. London: Macmillan. 1912. Pp. xxx+461. 12s. net.

[To be reviewed.]

HAMMOND (J. L. and B.). *The Village Labourer, 1760-1832: A Study in the Government of England before the Reform Bill*. London: Longmans, Green. 1911. Pp. x+418. 9s. net.

[To be reviewed.]

JEVONS (W. STANLEY). *The Theory of Political Economy*. Fourth edition, edited by H. Stanley Jevons. London: Macmillan. 1911. Pp. lxiv+339. 10s. net.

[Reviewed above.]

KITSON (ARTHUR). *Strikes and Bank Failures: an open letter to the Chancellor of the Exchequer*. London: J. M. Dent. 1911. Pp. 76. 6d.

[Issued by the Banking and Currency Reform League (10, Adelphi Terrace, Strand) in support of the opinion that the Bank Act should be repealed and all individuals left free to issue inconvertible paper money. "The League maintains that freedom of banking would reduce the interest on loans to a sixth or an eighth of the present average rate . . . and that it would enable such a growth of enterprise that wages must soon rise to their economic limit (since the capable unemployed would be automatically absorbed) and the price of commodities fall to the lowest possible."]

LAYTON (W. T.). *An Introduction to the Study of Prices: with special reference to the history of the nineteenth century*. London: Macmillan. 1912. Pp. xi+155. 2s. 6d.

[To be reviewed.]

RICHARDSON (THOMAS, M.P.), and WALBANK (J. A.). *Profits and Wages in the British Coal Trade, 1898-1910*. Newcastle-upon-Tyne: W. H. Robinson. 1911. Pp. 96. 6d.

[The authors analyse the average profits in the British Coal Trade over a period of thirteen years with a view to showing that the industry as a whole is in such a position that a minimum wage would involve no undue burden. They claim that the Companies, for which the data were available and with which they deal, represent about one-third of the trade. After necessary allowances have been carefully made the authors estimate an average return to the shareholders of 9.6 per cent. per annum on the ordinary capital. The pamphlet is written from a somewhat partisan standpoint, and its figures have been criticised by Sir A. B. Markham and others; but it affords a not uninteresting contribution to the problem of the Statistical Measurement of Profit.]

SAINSBURY (ETHEL BRUCE). *A Calendar of the Court Minutes, &c., of the East India Company, 1644-1649*. With an introduction and notes by William Foster. Oxford: Clarendon Press. 1912. Pp. xxviii+424. 12s. 6d. net.

[The third volume published. To be reviewed.]

SARMA (S. K.). *Indian Monetary Problems*. Madras: Law Printing House. 1911. Pp. xvi+191. Rs. 2.

[The author recommends the reopening of the Indian mints to the free coinage of rupees.]

SCHLOESSER (HENRY H.) and CLARK (W. SMITH). *The Legal Position of Trade Unions*. London: P. S. King. 1912. Pp. xxiv+268. 10s. 6d. net.

[To be reviewed.]

SHAW (NORMAN). *The Soya Bean of Manchuria*. Published by order of the Inspector-General of the Chinese Imperial Customs. Shanghai and London: P. S. King. 1911. Pp. 32, with map, diagram and 6 plates. 3s. net.

[Reviewed above.]

SMART (PROF. WILLIAM). *The Distribution of Income*. Second Edition. London: Macmillan. 1912. Pp. xix + 345. 3s. 6d. net.

[Professor Smart, in this second edition, makes no change in the substance of the argument. "But," he adds, "as will be seen from the first chapter, I am less satisfied than I was with the issues of our system. In the enthusiasm of comparative youth, I thought it a fine thing to have demonstrated that the existing distribution was not 'unjust.' . . . But a distribution may justify itself on purely economic grounds, and may yet leave much to be desired."]

TODD (E. ENEVER). *The Case against Tariff Reform: a reply to The Case against Free Trade*, by Archdeacon Cunningham. London: John Murray. 1911. Pp. ix + 156. 2s. 6d. net.

[Reviewed above.]

WHITEHOUSE (J. H.), Edited by. *Problems of Boy Life*. London: P. S. King. 1912. Pp. viii + 342. 10s. 6d.

[To be reviewed.]

ALDRICH (HON. NELSON W.). *Suggested Plan for Monetary Legislation*. (National Monetary Commission.) Washington. 1911. Pp. 24. \$0.05.

[A revised and more complete account of the proposals originally submitted to the National Monetary Commission by its Chairman in January, 1911.]

ANDREW (HON. A. PIATT). *The Purpose and Origin of the Proposed Banking Legislation*. Boston. 1911. Pp. 50.

[Three addresses, of a popular and explanatory character, by the Secretary to the United States Monetary Commission, advocating Senator Aldrich's proposed scheme of monetary legislation.]

DEVINE (EDWARD T.). *The Spirit of Social Work*. New York: Charities Publication Committee. 1911. Pp. xi + 231. \$1.

[Nine addresses originally delivered, for the most part, to philanthropic congresses or associations of social workers.]

FRIEDENSBURG (DR. FERDINAND). *The Practical Results of Working-men's Insurance in Germany*. New York: 1 Liberty Street. 1911. Pp. 62.

[A translation by Dr. L. H. Gray, published under the auspices of *The Workmen's Compensation Service and Information Bureau*, of an essay by the former President of the Senate in the Imperial Insurance Office of Germany, which originally appeared under the title of *Die Praxis der deutschen Arbeiterversicherung* in the *Zeitschrift für Politik*. Dr. Friedensburg seriously criticises the German system of insurance against accident and illness. He maintains that "the Imperial Insurance Office is overburdened with frivolous and unfounded claims," and that fraud and false evidence is rife. The pamphlet has been the subject of a favourable article in the *Spectator*, but has been greeted in the Social Democratic press of Germany (according to the Preface) with "foul invectives."]

GROAT (GEORGE GORHAM). *Attitude of American Courts in Labour Cases: a Study in Social Legislation*. (Columbia University Studies.) New York: Columbia University. 1911. Pp. vii + 400. 10s.

HAINES (HENRY S.). *Problems in Railway Regulation*. New York: The Macmillan Company. 1911. Pp. 582.

[Reviewed above.]

HICKS (FREDERICK CHARLES). *Competitive and Monopoly Price*. Cincinnati: University Press. 1911. Pp. 39.

[Vol. vii. No 2, of the University of Cincinnati Studies. "A criticism of current theory with special reference to its bearing on the trust problem," of no great novelty.]

HOLLANDER (PROF. JACOB H.). *Bank Loans and Stock Exchange Speculation*. (National Monetary Commission, Senate Document 589, 61-2.) Washington. 1911. Pp. 27. \$0.05.

[An interesting and concise account of the various channels through which bank loans, based upon Stock Exchange securities, are contracted in the United States.]

HUAN-CHANG (DR. CHEN). The Economic Principles of Confucius and his School. 2 vols. (Columbia University Studies.) New York: Columbia University. 1911. Pp. xv+362+394. 20s.
[To be reviewed.]

LOWENTHAL (ESTHER). The Ricardian Socialists. (Columbia University Studies.) New York: Columbia University. 1911. Pp. 105. 3s.

[Chapters on Thompson, Gray, Hodgskin, and Bray. To be reviewed.]

MOORE (PROF. HENRY LUDWELL). Laws of Wages, an Essay in Statistical Economics. New York: Macmillan Co. 1911. Pp. 196. \$1.60.

[Reviewed above.]

SCOTT (PROF. W. D.). Increasing Human Efficiency in Business. New York: Macmillan Co. 1911. Pp. 339. 5s. 6d.

["A contribution to the Psychology of Business." Successive chapters on imitation, competition, loyalty, concentration, wages, pleasure, and the like as "a means of increasing human efficiency."]

STOCKTON (FRANK T.). The Closed Shop in American Trade Unions. (Johns Hopkins University Studies. Series xxix. No. 3.) Baltimore: Johns Hopkins Press. 1911. Pp. 187.

[To be reviewed.]

D'AMBROSIO (MANLIO ANDREA). La Passivité Economique, Premier Principes d'une Théorie Sociologique de la Population économiquement passive. Paris: Giard. 1912. Pp. 389. 8 fr.

[A translation from the Italian, somewhat abbreviated. An English translation is announced, in the Preface, as being in preparation. To be reviewed.]

DUPONT DE NEMOURS. De l'exportation et de l'importation des Grains, 1764. L.-P. ABEILLE. Premiers Opuscules sur le Commerce des Grains, 1763-1764. Paris: Geuthner. 1911. Pp. xlv+128.

[The latest addition to the *Collection des Économistes et des Réformateurs Sociaux de la France*, edited with an introduction and notes by Professor Edgard Depitre.]

FISHER (IRVING). De la Nature du Capital et du Revenu. Traduit de l'anglais par Savinien Bouyssy. Paris: Giard. 1911. Pp. 475. 12 fr.

[A translation of Professor Fisher's *The Nature of Capital and Income*.]

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THE BREAK-UP OF THE VILLAGE COMMUNITY IN RUSSIA.

I.

THE recent developments in Russian agricultural organisation have attracted little attention outside Russia itself. None the less, they are of much interest to the statesman as well as to the economist; indeed, no one who wishes to understand the struggle now going on within the dominions of the Tsar can afford to neglect them.

Russia is a country of peasants. Her peasantry form the basis of her economic position in the world, and the military power of the Empire rests upon it. Manufactures, in spite of the rapid progress they have made in recent decades, are still of relatively small importance: not more than one-sixth of the population was engaged in trade and industry at the time of the census of 1897; hardly one-eighth were then living in towns. The great landed estates which fifty years ago played a leading part in the economic life of the nation have never recovered from the blow dealt them by the emancipation of the serfs. Accustomed to the sleepy methods of a patriarchal system based on serf labour, the land-owning nobility proved unable to adapt themselves to the new conditions. The redemption money paid by the liberated peasants, instead of being invested, was spent unproductively. But few made the attempt to alter their methods of management in a rational manner suited to the new legal and commercial position, and most of those who did make the attempt failed because they lacked the mental qualities needed to work successfully under modern industrial conditions. Most of the land-owning nobility preferred to entrust the management of their

remaining lands to the peasants. The land was either stocked by the neighbouring peasants with cattle and implements for the benefit of the landowner, in the manner hitherto customary; or it was leased to the peasants, who were especially eager to take land because most of them had not received an adequate portion at the time of the emancipation, and gladly paid rents which stood in no reasonable proportion to the profits. The bonds which connected the land-owning nobility with estates which were little more than a source of rent were, therefore, loosened on all sides, and it is not surprising that they should be easily broken. To enable the nobility to go on living according to their rank after, as before, the emancipation, more was required—when the capitalised redemption payments came to an end—than the land now remaining to the landlords could yield on the traditional methods of cultivation. Yet they were not in a position to raise the rentable value of their land by a rational alteration in management or by the application of fresh capital and more expert knowledge. Nothing remained, therefore, but to exhaust still further the capital value of the property. Woods were cut down in wholesale fashion; credit on mortgage was freely used—all the more since the special bank established by the Government for the benefit of the land-owning nobility advanced money on the estates of the nobles upon terms which were exceptionally favourable. The money that came in was, however, spent as unprofitably as the redemption money had been previously. Ruin seemed unavoidable, and the Russian gentry began to sell their land with unexampled rapidity. Even towards the end of the 'seventies in the nineteenth century, one-fifth of the land retained by the nobles after the emancipation in 1861 had passed into the hands of commoners. The levy of 1887 showed a further considerable decline. The succeeding twenty years brought no change of tendency: the agricultural statistics for 1905 show that in the course of forty-five years the nobility had given up half their estates to commoners. Then came the years of the revolution and of the peasants' risings. In the purely Russian provinces violence against the persons of the landowners was the exception, but many houses and farm-buildings were destroyed by the rioting peasants, cattle were slaughtered and implements spoilt. Life in the country was so disturbed that many of the landowners lacked the courage to go back to their ruined homes in order to rebuild them. More than ten million *dessatines*—quite one-fifth of the land still owned by the nobles—was offered for sale to the Peasants' Bank during the years 1906

and 1907. It seemed almost as though the last hour had come of the land-owning nobility in Russia.

The Government, troubled by the fate of the nobility, now took vigorous action. In order to allay the panic the Agricultural Bank was instructed to purchase at high prices the land offered, and this more especially in the districts most affected by the unrest among the peasantry. Over three million *dessatines*—as much as the agricultural land of Saxony, Württemberg, and Baden taken together—were acquired by the State in the course of three years. The object was attained; some degree of quiet prevailed; confidence in the protecting hand of the Government was restored; the fear of a violent fall in prices and the haste to realise the estates before they lost all value disappeared, and the process of the surrender of the land by the gentry gradually resumed its former rate of a couple of hundred thousand *dessatines* yearly.

But the nobility, whose existence was threatened at its very foundations by its own economic incapacity, held the governing power in its hands. Nowhere else in the world does there exist such a marked contrast between the political supremacy and the economic weakness of a class. Hence it is evident that so long as there is control over the machinery of government, attempts will be made to use it in furtherance of class interests to supply some measure of economic strength. Much in Russian economic legislation can only be understood in view of this fight waged with political weapons for the economic existence of the nobility. The conceptions of what does in fact further the interests of the nobility have frequently varied in the course of years, and the Government policy has varied correspondingly. The emigration of the peasants from European Russia to Siberia, for instance, was for a long time thought by the landowners, who were in need of labourers, to be contrary to their interests; accordingly, the Government tried to prevent emigration. Then came the disturbances amongst the peasantry; fear made it seem advisable to force the unquiet elements outwards, the more since, thanks to the rapid increase in population, an excess rather than a scarcity of labour was noticeable in the fertile provinces of the interior. Opinions in Government circles upon the value of emigration altered at once: not only were the hindrances previously placed in its way removed, but emigration—especially from the disturbed districts—was directly encouraged in every way, without regard to the fact that the districts to which it flowed were not in a condition to absorb such an increasing flood of immigrants.

In like manner the changes in the legislative treatment of the village community can only be understood in connection with the prevalent opinions in regard to the interests of the nobility. As long as the landlords held the village community to be useful, it was favoured and maintained in opposition to the tendencies existing within itself. But the unrest among the peasantry at the beginning of the new century gave rise to the belief that the village community supplied a favourable psychological breeding-ground for the notion peculiar to Russian peasantry that all land suitable for agriculture should be divided amongst the peasants. And in order to cut off this sinister idea at its root, vigorous measures were immediately taken, in the Imperial Decree of 9/22, xi, 1906, to destroy the village community.

II.

The characteristic features of the Russian village community are well known. With the exception of the house and the strip of land adjoining, which remain as inherited property in the family, the peasant proprietor can claim no portion of land as his own: plough-land and meadow, wood and heath—all belong to the commune, and are made over to the individual for temporary use alone. A man does not get land because he inherits it from his parents, but because the commune assigns it to him, and he only keeps possession of the plots so long as the commune thinks fit. The meadow-land is, as a rule, divided annually amongst the various members, immediately before the mowing. The plough-land is generally allotted for a longer period—not less than twelve years, according to the law of 8, vi, 1893—in numerous strips scattered at random. At the end of the period a redistribution takes place: all the portions are recovered from their actual possessors, and each father of a family receives back out of the whole as much as he is entitled to according to the method of division adopted by the commune. The basis of the division is either the number of males in the family or the number of males of an age to work—or often the number of the family, without regard to age or sex. The whole system thus works out in principle so that the families whose numbers have increased at more than the average rate since the last division obtain land at the expense of those who have multiplied less quickly.

This curious reciprocal insurance against the disadvantages of a too rapid increase in family prevailed, until a short time ago, in most of the provinces of European Russia: about ten million

peasant families with a hundred million *dessatines*—more than four-fifths of the land allotted to the peasants at the emancipation—were legally subjected to it. In actual fact, it is true, the communes did not make a like use everywhere of the powers legally possessed by them. There were communes in which no re-distribution had been undertaken for such a long time that it almost seemed as though the people had given up all claim to such readjustment. There were others in which the right to receive land was confined to members of old families who had been there at the time of the emancipation, so that the system had acquired a peculiar character resembling a tontine. But since, even in these communes, according to the existing law, it only required the agreement of two-thirds of the heads of families for a re-distribution on the lines usual elsewhere, neither the neglect to re-divide during a long period nor the adoption of a method of division different from the customary, could be regarded as certain evidence that the peasants had renounced this peculiar system of insurance. It often happened that, after many years of apparent peace, an ever-growing discontent appeared in the commune, which subsisted until those who were dissatisfied with the existing distribution got the upper hand and secured what they considered a more equitable division. Thus, for example, the second half of the 'eighties in the nineteenth century was marked by numerous re-distributions in communes which had undertaken no such readjustment since the land was assigned to them at the time of the emancipation of the serfs.

Side by side with this classical form of village community, where the commune retains the authority to determine the size of the holdings of its members, we often find in Russia agricultural organisations where the powers of the commune are less extensive; thus, for example, in the districts of the military colonisation, which proceeded during the sixteenth century from Moscow southwards, the so-called "share-ownership" (*Antheilsbesitz*) prevails. In this case the proportion of property which belongs to each individual family is independent of the decisions of the commune, and is determined by inheritance; on the other hand, the position of the plots is not fixed, since the commune can exchange these at will amongst neighbours, in furtherance, for instance, of consolidation. And in some districts, especially towards the western frontier, compulsion in cultivation (*Flurzwang*) is met with in the form so often found outside Russia, of a mutual interdependence of individual cultivators, determined by the chance position of their land, as regards the choice of

methods of cultivation, and the carrying out of agricultural work.

In the Far East, in the sparsely populated steppes and woods of Siberia and Central Asia, we find the existing village community in its earliest beginnings. There, where there is as much free land as is wanted, no one troubles about his neighbour and the plots of land cultivated by him; there is no common regulation of the conditions on which land is owned and cultivated. It is only as population increases that some kind of organisation in a village commune gradually develops; generally by a process of lengthy and often obstinate disputes between those cultivators, who have secured land superior in quantity and quality, and those less fortunately placed. From concessions, at the outset quite small, made to the others by the cultivators better provided with land, there gradually develop more far-reaching encroachments on the rights of individuals, until finally the power of the commune to regulate conditions of tenure and cultivation is universally recognised.¹ And a further interval must then elapse before the encroachments of the commune take the form of a regular, periodic re-distribution such as we are familiar with in European Russia.

A closer observation of the present position of the village community in Russia thus presents a variously coloured picture—all varieties are found there, from the embryonic to the most highly developed, and some even in fairly advanced stages of decay. In one place the village community flourishes amid the general recognition of a satisfied peasantry, in another it is only established after severe struggles, and in others the factors inimical to it gain the upper hand and individual ownership thoroughly establishes itself through the gradual subsidence of communism.

III.

It is evident how difficult and responsible a task it is to regulate by law such varying conditions, regard being had to the immense extent of the Russian Empire, the important differences in the ways of living and methods of cultivation of the population, and the differences resulting therefrom in the constitution of the village communities. Measures need to be carefully weighed and accurately adapted to existing conditions in order to attain the object of the legislator without cutting too

¹ I venture to refer those who wish to follow-out more closely the evolution of the village community to my study on "Die Feldgemeinschaft." (Strassburg, 1902.)

deeply into the flesh. A regulation which is quite suited to certain conditions of life, and which will be welcomed as beneficial by the people subject to them, will fail in other cases to attain its end and will be regarded as oppressive. Uniform, rigid rules are of little avail under such circumstances; the rules which regulate the village community must be as flexible as its own constitution.

The difficulties which assail the legislator are yet further increased by the passion with which Russian public opinion watches the fate of the village community. There is hardly any other question in economic policy which is discussed in Russia so persistently and so fervently as that of whether the village community should be abolished or maintained. Has the village community vitality or not? Is its influence upon the life of the people beneficial or harmful? Even during the preparations for the emancipation of the serfs, these questions were hotly debated, and they are still discussed to-day with hardly less ardour. At that time the village community was supported on the one hand by the Slavophiles, who advocated the allotment of land to the communes because they saw in the village community an institution arising from the deepest source of the Russian national spirit, and also a powerful defence against the growth of a rotten "Western" civilisation; and on the other hand, by the "Intellectuals," who grouped themselves round Tschernischeffsky, the influential leader of the young Russian Socialists, and who regarded the village community as a springboard to carry them into the kingdom of Socialism. As regards the opponents of the village community, who thought that the well-being of the emancipated peasants was to be secured by assigning the land to individual families, they adopted the creed of Manchester Liberalism and detested the village community as one of the hated limitations on the freedom of the individual in economic affairs. They were not, however, wholly successful in enforcing their opinions: the Government had not the courage for a radical measure—such as that of suppressing the village community—which would have increased the technical difficulties of the reform; the land was assigned to the communes, to whom was left the task of dividing it amongst the various families. But the recognition of the village community passed current for a temporary concession; it was supposed that the advantages of individual ownership would soon make themselves apparent, and that the people would spontaneously abandon the communal system. Consequently, the legal regulations applied to the

village community—partly, indeed, because information was at that time somewhat limited—were throughout unsuited to its nature and complexity. Had the expectation been fulfilled that the communal organisation would shortly break down, they might nevertheless have made matters easier. But the village community displayed a much greater vitality than was anticipated. Hence there was a growing struggle—on the one side for the creation of a favourable legal position, on the other for the final abolition of the system. Without essential change in the arguments employed, this struggle has continued up to the present day with varying fortune, and even the most recent radical reform which has aimed at a complete abolition of the village community, has proved unable to bring it to an end.

It would take me too far to give a complete account here of the arguments of the opponents and friends of the village community, arguments which have been worked out to a greater and greater nicety in the course of generations. In the existing state of our knowledge a calm survey of the reasons for and against the communal system can scarcely lead to any other conclusion than that both the hopes and the fears with which the village community has been regarded have been greatly exaggerated. The village community is an almost insuperable obstacle to technical progress in agriculture, say the opponents; it is in those very places where unrestricted private ownership affords free scope to the creative enterprise of the individual that progress is possible. A quarter of a century ago such opinions could be maintained in good faith, although even then persons were not lacking who pointed out in detail the partiality of this view. But nowadays, when we see before us so many examples of extraordinarily rapid technical improvements, such, for example, as the adoption of compulsory cultivation of forage by peasant cultivators in those very districts where the communal system is most firmly established, the position can only be maintained by those who either do not or will not understand the conditions upon which they are pronouncing judgment. The village community *may* undoubtedly under certain circumstances act as a drag upon technical progress, but it need not do so; on the contrary, it may actually serve as a lever to assist such progress, if people know how to manage it. In 1892 two communes in the Wolokolamsk district of the province of Moscow replaced the traditional three-field system which, on account of the lack of meadow and grazing land noticeably prevalent in Central Russia, failed to supply sufficient pasturage for cattle, by an eight-field system and the

cultivation of meadow clover. The experiment was successful, and the example was soon followed in the neighbouring districts. In 1893 seven other communes introduced clover cultivation; in 1894 fourteen more imitated them, and during the next five years 127 communes adopted this plan, and in this way a far-reaching reform in methods of cultivation was carried out in the course of six or seven years on half the land owned by peasants in the district, thanks to the assistance of the experts in the service of the local authority, who understood how to adapt themselves effectively to the peculiarities of the communal organisation. In other districts, too, when the authorities paid sufficient attention to the wants of the cultivators, matters progressed with equal rapidity. In the Wezeja district the movement began in 1897, and in ten years the reform had already been carried out over three-fifths of the peasants' land. At present there are in the province of Moscow five districts in which clover is regularly cultivated by not less than half the peasants, in four districts it has been introduced by between a quarter and a half of the peasants, and in four districts only, which are amongst the more industrial and where the movement was started latest, is the proportion less than a quarter. Taken altogether, clover was cultivated in 1910 by 1,660 communes, owning 522,000 *dessatines* of arable land (i.e., 32 per cent. of the land held by peasants in the Moscow province); and in many other provinces—Wjatka, Twer, Smolensk, Wladimir, Kaluga, &c.—equally good results have been reached as soon as the technical instruction, with which the peasant—whether he belong to a village community or not—cannot dispense, has been properly organised. This progress should be compared with the spread of clover cultivation amongst the peasant cultivators in countries where the village community is unknown, and then judgment can be pronounced as to the alleged inevitability of a lack of technical advance within the village community.

Facts have thus entirely falsified the expectation of the opponents of the communal system, but on the other hand, its friends have not escaped disillusionment. It was held that the village community would form a sufficient obstacle to the rise of an unpropertied proletariat, with an agricultural system which guarantees to each an equal right to receive an assignment of land from the commune, everyone capable of work can always earn a living by his own husbandry, since the means of work cannot fail him. Such was the picture people were glad to paint, but the reality has been different. For on the one hand, all the

communes do not make a like use of the powers possessed by them of dividing the land amongst their members in accordance with the vote of two-thirds of these members; in many cases, for instance, women are excluded from the assignment of land, so that families where the children are girls get hardly anything; re-distribution is often delayed for a long period; in some cases a system of division is adopted which retains no attempt at equality; and lastly, it is not enough for the farmer to receive the allotted land—he must also have at his disposal a sufficiency of livestock and implements which are not owned in common, and are not equally divided amongst all from time to time. Thus, if a member of the community lose his stock through any misfortune, it helps him but little to receive the land assigned to him by the commune; he falls, nevertheless (since he is unable to stock his land) into a condition hardly distinguishable from that of a proletarian. And finally, it must not be forgotten that the land made over to the peasants at the time of the emancipation was for the most part inadequate to support their families under the traditional methods of cultivation. The peasants are forced to rent land from the landowners. Under such circumstances it is easy to understand that even the most equal division of the communal land will not save all the members from agricultural ruin. The statistics show, in fact, that the percentage of persons who must properly be reckoned as belonging to the proletariat, even in those districts where the communal system is especially vigorous, is neither small nor diminishing.

With regard to the conception of the village community as a first step towards Socialism, this view is based upon such vague psychological considerations in the minds both of those who are enthusiasts for the goal and of those who detest it, that it belongs rather to the class of impressions (which, nevertheless, in this case as in so many others, weigh heavily in the scale) than to that of arguments which can be reckoned with. The fact that for such a considerable portion of the property of the people there is no family inheritance may, indeed, have contributed to prevent individualism in Russia, in all classes of society, from flourishing to the same extent as in other civilised countries. In this sense the village community may, perhaps, be spoken of with some justice as a favourable soil for Socialistic opinions. But since so many other factors are and have been active in the same direction, the outcome could hardly have been different even without the co-operation of this particular one.

Still less calculable is the alleged directly educational influence

supposed to be exercised by the practice of re-distribution. In cases where the fresh division proceeds in an orderly and peaceful way amidst a general recognition of its justice, it may well be supposed that the practice leaves necessary traces in the formation of a certain feeling of solidarity, of deeper sympathy, and of a greater mutual reliance. But often the two-thirds majority required to carry out the new division is based on a most complicated coalition of different interests, and the re-distribution is forced upon an actively resisting minority, a situation leading occasionally to fighting and even bloodshed. Besides, the feeling of solidarity is, as a rule, limited to the narrow circle of the members of the community; towards outsiders, even those living in the same village, the behaviour is usually what it would have been if no communal education had been enjoyed. Hence this mental condition affords a basis for the Socialist State hardly better than the usual family feeling with its inherent family egotism. •

I do not propose to examine in turn all the pros and cons which have been set forth in detail during this literary feud of a generation long. Such an examination would make little difference to an unprejudiced analysis. There is no evidence of such palpable disadvantages as would appear to justify a policy of forcing the people to abandon the village communities; and, on the other hand, the advantages of the system are too indefinite to allow a balance in its favour to be reckoned on with adequate certainty—not even when regarded from the standpoint of the Socialist ideal. Neutrality is thus distinctly indicated as the rule of behaviour for the Government towards the village community. The organisation should not be forced upon those whom it no longer suits. But neither should it be forcibly destroyed in places where it is still adapted to the taste of the people, so that they still hold to it. Rather such a legal position should be established that those to whom the communal system is no longer suited can abandon it unhindered, but without injuring others, and those who wish to adhere to it can do so in such a manner that the possible disadvantages of a communal organisation of agriculture are guarded against as effectively as may be. Such is the problem for the legislator who approaches it *sine ira et studio*.

IV.

How then can this problem be solved?

Let us consider first the chief factor in the problem, the re-

distribution. A member of the village community is no longer willing to share in this peculiar form of insurance and to take the risk of having to resign a portion of his land in case his family should not increase sufficiently fast. In accordance with what has been said above there is no adequate reason to forbid his withdrawal or to make it more difficult. Then how can his claims be regulated so that neither he, nor his companions who hold to the community, shall suffer?

If we adopt a conception of the village community as a periodically renewable arrangement for insurance, it appears that this arrangement can be done away with most conveniently at a time of re-distribution; for this is the moment when the reckoning is made up for the preceding period, after which the agreement is renewable. At this moment the mutual obligations are quite clear; if, for instance, it is customary to divide the land according to the size of the family, then those families which have had the luck during the period in question to increase at more than the average rate will receive land at the expense of those whose expectations of increase have not been fulfilled. After this settlement all, whether winners or those who on this occasion have to reckon a loss, can conveniently be left free to enter into a similar agreement for the future or not.

The matter is less simple if the withdrawal takes place in an interval between two re-distributions. For it is in general doubtful whether the right to withdraw at any time should be granted to the members of a village community, or whether it is not more advisable to make certain restrictions. In so far, however, as withdrawal is allowed, the upper limit of the amount of land to which the retiring member is entitled can be easily determined for this case also: it must obviously be no more than he would receive should a re-distribution take place at that moment.

When the claims of the retiring member have been determined, a further problem arises as to the way in which they should be met. If we leave on one side the disputed question in what cases the assignment of land should be replaced by a money indemnity, the bonds of the village community can be severed in two ways: either the retiring member is assigned definite plots of land, or else his proportionate share in the common property is fixed once for all, but the community retains the right to determine the actual position of his plots in like manner as for the members who take part in the re-distribution. The first solution has undoubtedly much in its favour if the land can be assigned

in one piece and in a position convenient both to the retiring member and to the others. But if the retiring member receive his old strips scattered at random, the abrogation of the right of the commune to make an exchange of plots in case of need may conceivably result in an unprofitable system of cultivation. The existing interdependence in agricultural management would continue, and the means at present available to mitigate the disadvantages of the random distribution, so far as these are felt by the people, could no longer be employed. By an assignment of separate plots, the village community might even suffer no slight hindrance when it undertook a combination of the plots of its members. Hence, should it be impossible to assign his share to the retiring member in one place, it is much better to fix the fraction of land which belongs to him. But it is only in exceptional cases that the land can be allotted in one piece without the other cultivators co-operating in an exchange of plots. And such an exchange is attended with expenses and disturbances in cultivation, so that it can evidently not be left to the judgment of the individual to demand it at will at any time. Consequently, withdrawal from the village community, except when it coincides with a general re-distribution, should, as a rule, take the form of transition to "share-ownership."

These are the main outlines of a non-partisan solution of the problem based upon a consideration of the facts. But they have hitherto never been carried out in legislation, since neither the opponents nor the friends of the communal system are willing to agree to this solution. Indeed, according as one or the other temporarily secures the upper hand, the actual solution always deviates from that outlined above, now in one direction, now in another. At the time of the emancipation people thought, as has been stated above, that the village community would not last long, but that the peasant would soon pass to individual ownership. It was desired to make this transition as easy as possible. But in the meantime the village community could not be dispensed with because the firm hold imposed upon its members afforded security for the redemption payments. A way out was found in the stipulation that each person should be free to withdraw from the village community with the portions of land assigned to him at the time, on condition that he paid that fraction of the redemption money which fell on those portions. This stipulation was most unfavourable to the village community, but for a long time practically no advantage was taken of it since

the redemption payments were very high and few wished in this way to become owners of the portions of land they held. But gradually the position altered. The price of land rose; the redemption debt was reduced, and what was left diminished year by year. At length a time came when this clause in the law attained practical importance. The gain for those who withdrew was often very great. By means of a single small payment it was possible for an individual who would have had to give up land at a re-distribution to escape the obligation and to keep this land, which should have been given up, for himself. Thus it came about that the number of those who availed themselves of this clause in the law began to increase greatly during the 'eighties in the nineteenth century; in 1892 the redemption money paid under it reached the hitherto unprecedented sum of 800,000 roubles. There is no need to be an enthusiast for the communal system to recognise the untenable nature of such a legal position. Its injustice was obvious, and in 1893 the friends of the village community succeeded in modifying the law. They did not, however, use the opportunity to bring about a position of stable equilibrium, by which the interests alike of retiring members and of those who remained would have been protected; the just claims of the former to be allowed to withdraw from the village community in some manner not too burdensome, were, on the contrary, sacrificed in the desire to strengthen the commune. The Edict of 14, xii, 1893, made withdrawal subject to the consent of the commune, so that the right to withdraw was rendered illusory; from henceforth membership of the village community became, in fact, almost obligatory for those born into it. This was at once shown in the number of withdrawals; whereas in 1892 and 1893 the sums paid on this account had amounted to about a million roubles, the payments dropped during the second half of the 'nineties to under 50,000 roubles.

Thus the law of 14, xii, 1893, produced a situation as little tenable as the previous one. For it is essential to the peaceful development of agricultural organisation amongst the peasants that it should be possible to withdraw from the village community without forfeiting rights to property, otherwise the community becomes an object of attacks too violent and only too just. Ten years had not passed before yet another reform had been begun. This time the matter was planned on a large scale: all laws affecting the position of the peasantry were to be revised together and codified. A Bill was drawn up and published in 1903, a large

section of which was devoted to a complete reorganisation of the village communal system. Withdrawal from the community was regulated as follows : any person might withdraw at a time of redistribution, provided he were prepared to take the land assigned to him in a single piece ; the assignment of ownership in strips of land lying at random as well as a transition to share-ownership was regarded as definitely undesirable. During the interval between two re-distributions, on the other hand, withdrawal was only allowed if one-fifth of the members (or, in great communities, fifty members) applied for it simultaneously. The extent of this limitation was not overlooked ; but it was considered necessary because, as the preamble states, the right of an individual to demand at any time the assignment of land in a single piece, would render the lives of the others unbearable through continual disturbances in husbandry, and would force them to abandon the village community ; but a forced abolition of the communal system was not desired.

This Bill, drawn up during the Ministry of von Plehwe, was destined to a melancholy fate. Put on one side owing to von Plehwe's death and the events following it, it was never debated, and at first things went on as they had done under the Edict of 14, xii, 1893, until the Imperial Decree of 9/22, xi, 1906, made a complete change in everything, being entirely in favour of the persons withdrawing, in that it not merely afforded no protection to the interests of those remaining in the village community, but deliberately injured them with the intention of dealing a death-blow at the communal system. All the village communities were divided into two groups. To the first belonged those which had undertaken no re-distribution of land during the last twenty-four years ; without further ado these were regarded as no longer possessing vitality, and each member was permitted to transfer the portions of land assigned to him by the commune to his own possession by means of a memorial addressed by him to the competent authority, without having to secure the consent of the commune or in any way concern himself further about the interests of the members. With respect to the village communities in the second group, the Government did not dare to declare them spontaneously dissolved ; an indirect method was, however, found which would lead to almost the same result. Any member of these communities was allowed to withdraw at any time and to retain as owner all plots of land assigned to him for temporary use. The person withdrawing was merely obliged to pay in certain cases a small money indemnity to the community

for a part of the plots of land—an indemnity quite out of proportion to the real value of the land. The proportion of land for which money was to be paid was determined as follows: the person withdrawing retained without payment as much of the share assigned to him at the last re-distribution as he would have been entitled to if a re-distribution had taken place at the time of his withdrawal; for the remainder, if there were any, he must pay the price at which the land had been acquired by the commune concerned at the time of the emancipation of the serfs.

None of these regulations could bear reflective criticism. In fact, they are to be regarded in no way as an attempt at a reasonable solution of the problem, but can only be understood as the outcome of a fighting mood for which the desired end justified the means adopted. The declaration that the village communities which had undertaken no general re-distribution during twenty-four years were no longer active, was the less expected since hitherto the efforts of legislators had been aimed at lengthening the interval between the re-distributions, and the law of 8, vi, 1893, had even forbidden re-distributions more than once in twelve years. Moreover, the assumption that communities which had made no general re-distribution for a long period had no longer any vitality did not correspond at all with the facts; in many cases the community judged it more convenient to secure by other means the end at which re-distribution aimed; for instance, by the method of partial interchange, which did not affect all the members at once, but proceeded by groups. Such partial re-distributions were, it is true, forbidden in 1893, but had been legally allowed up to that time, and even afterwards they frequently occurred. Thus a test was chosen to distinguish the "dead" from the "living" communities which was quite unsuited for the purpose, and many communities were in this way reckoned as "dead" in which, in fact, the communal life was as vigorous as in the others.

In respect to the treatment of the village communities in the second group, it must first be noted that the price of land in Russia has risen very much since the emancipation of the serfs; thus the Decree, in permitting the extra land—to which, as the Decree itself acknowledged, the person withdrawing had no reasonable claim—to be acquired at the old price, was making the retiring member a present at the expense of his fellows. And the withdrawing member was favoured in yet another way: the quantity of land to be received without payment was not properly calculated. The amount which the person concerned would

receive at another re-distribution depends, not only on the number of shares which he could claim, but also on the size of the shares; this size, which is fixed according to the number of claimants between whom the total area is to be divided, alters with time, and, in fact, the single shares become as a rule smaller as the population increases. Hence, in calculating the amount to be received without payment, account should have been taken of alterations in the denominator as well as in the numerator of the fraction which expressed the share of the withdrawing member at the time of the last re-distribution. Thus the Decree allowed the withdrawing member to obtain one portion of the extra land not properly belonging to him at an exceedingly low price and to get the rest for nothing. Hence, even if one were inclined to regard forced expropriation as imperative in those cases where it favours the richer members as against the poorer ones, these regulations are objectionable because they determine the sum to be paid for the expropriated land in so unjust a way.

The harshness and injustice of the new law were at once exposed in the Press. But the Government was not to be moved to make alterations—so much was at stake for it. Justice is often sacrificed to political expediency; and political expediency had begun to demand imperiously that the village communities should be destroyed as quickly as possible, cost what it might. To secure this object it was necessary to favour the withdrawing members in every way and to make those who held to the communal system regret their obstinacy. For if both parties had received impartial treatment it was to be expected that the village communities would weather the new storm as they had formerly resisted similar attacks.

V.

How is this sudden change in the opinions of the governing classes to be explained? Only two years before the tendency was rather to encourage the village community than to attack it; in 1893, as we have seen, an exaggerated protection had been granted to the communes in order to save them from threatened dissolution. And now all at once everything is changed. Every lever is employed to break up the village community. To evade the normal working of legislation prescribed by statute an Imperial Decree is issued, directed against the village communities, and the officials carrying it out are instructed to do everything to prevent the new regulations from remaining a dead

letter. The administrative machinery works at high pressure. For the officials concerned, from the governor downwards, there is henceforth no better recommendation than the large numbers of cultivators in their district who have withdrawn from the village communities. By the employment of all legal, as well as of many illegal means, efforts are everywhere made to swell the numbers as rapidly as possible. That the fight against the village communities is the axis on which our home policy turns, has been openly proclaimed by the President of the Council.

What then had happened in the interval to call forth this feverish reaction?

Two events had occurred which have made the village communities objects of hatred and fear to the land-owning nobility, in whose defence the Government came forward :—the peasants' revolt in 1905-6, and the agrarian reform proposed by the first Duma.

The disturbances among the peasantry bore, it is true, no direct relation to the village communities, and occurred equally in districts where these were unknown. But it was thought that there was a psychological connection to be found between the communal system and the demands formulated by the peasants, that the Government should provide them with sufficient land at the expense of those owners of land who were not peasants. Peasants who were accustomed to re-divide their own land repeatedly, according to the needs of the various families, could obtain no true conception of individual ownership and its inviolability; they could see no difference between their rights exercised in the village community over the land within its boundaries and the rights of the big landowners over their estates; what they demanded was in effect merely an extension of the communal system over those neighbouring estates which were at present not subjected to it. As long as the village community remained in existence there would be no end to such opinions. In order to destroy them at the root the peasants must be weaned from dividing up their land. As soon as they had secured the possession of their own land, which no one might take from them and which they must defend as their own property against encroachments from outside, they would learn also to respect the property of others. It is true that in order that the peasant proprietor may be a support to the existing order of society, he must possess enough land to enable him to live on it, and the land belonging to the peasants is for the most part insufficient to support them all. But a differentiation which

results in the formation of a vigorous peasantry on the one hand, and of a property-less proletariat on the other, is founded on the very nature of things. Hence, since in the political battle the wages must be laid on the strong—to use the words of Stolypin—it is only necessary to take care that this differentiation should be promoted instead of, as hitherto, hindered, and the game will be won, thanks to the numerous vigorous peasant proprietors arising out of the ruins of the village communities.

This is roughly a brief summary of the opinions which have gradually gained firmer ground in the influential circles of the land-owning nobility since the beginning of the unrest amongst the peasantry. But it happened, in addition, that the first Duma with zealous hand sketched out a far-reaching plan of land reform, and favoured an extensive alienation of land not held by peasants, which was to be divided amongst the peasant village communities. The various projects of reform which were laid before the Duma indicated, indeed, an almost complete disappearance of the large landed estates in Russia. And since the village community played an important part in most of these projects, partly from a liking for it, partly for technical reasons on account of its convenience in carrying out the apportionment of the land, the hatred of the great landowners was doubled. Were the village community not there—people were inclined to think—all the attempts to endow the inadequately provided peasant with land at the expense of the estate owner would collapse.

No sooner had the dissolution of the first Duma given a free hand to the Ministry than the campaign against the village community began. It opened with the Imperial Decree of 9/22, xi, 1906, which was followed by the Decree of 15/28, xi, 1906, which rendered easier the mobilisation of the peasants' lands. The issue of the two Decrees was based on Article 87 of the Constitution, which reserves to the Tsar the right to settle by Decree, in cases where postponement is impossible, during an interval when the Duma is not sitting, matters within its competence, with the proviso that Decrees issued in this way must be presented to the Duma for its approval within two months after the sittings are resumed. What justified an application of the emergency clause in this case was not much considered; apart from the haste to get rid of the village communities, and the desire to confront the Duma, which certainly would not have approved of the Government projects, with an accomplished fact, there were, with the best will in the world, no reasons to offer why the settlement of this difficult problem, whose solution had

already been delayed for years, could not be deferred until the Duma assembled.

Both Decrees were laid before the second Duma. The majority in the Duma, who were working for a land reform of the same nature as the first Duma, was opposed to them. But before they were actually repealed the second Duma also was dissolved, and the Decrees remained temporarily in force.

After the dissolution of the second Duma, as is well known, the franchise was altered by the *coup d'état* of 3/16, vi, 1907, and ascendancy in the Duma fell into the hands of the land-owning nobility. Thus a Duma was obtained which held similar opinions on the land question to the Government, and almost went further than the Government in hatred of the village community. The Decrees of November, 1906, were also presented to the third Duma, and this time were debated. After a very prolonged discussion the measures devised by the Government against the village communities were not only approved by the majority of the Duma, but were in parts made more stringent. Then the Bill as drafted by the Duma came before the Imperial Council. Here the fight began again. The Centre, representing the views of the Government, was here opposed by the Right and by the Left, which consisted of the University representatives. The two parties were almost equal. But finally, with the help of the votes of the Ministers, all the essential provisions of the Decree of 9/22, xi, 1906, were passed by the Council, though only after a fight lasting for months. The most important amendment was one altering the dividing-line between the "dead" communities and those still functioning; in the former class were only to be reckoned those in which there had been no general re-distribution since the land was assigned.

The Bill as amended by the Upper House had to be laid before the Duma again. Thus it came about that the provisional regulations of the Decree of 9/22, xi, 1906, after subsisting in fact for three and a half years, only became formally law in 14/27, vi, 1910, when the Bill drafted by the Duma and the Council was approved by the Tsar.

VI.

Five years have passed since the provisions of the Decree of 9/22, xi, 1906, came into operation. What has been their effect?

The outward result is impressive. More than two million

cultivators, as estimated in the official statistics, had given notice, previous to 1, i, 1912, of their wish to take advantage of the provisions; one and a half millions, holding 12 million *dessatines*, have, in fact, definitely withdrawn from the village communities. There are districts where the communal system must now be looked upon as abandoned. The advantages which fall to the lot of those withdrawing are so great that this can readily be understood; too much moral firmness would be needed to resist the temptation. Suppose that at any time a law were passed which permitted the non-payment of debts contracted by gambling or by dealing in stocks. A sense of honour would certainly prevent many debtors from making use of the permission, since apart from legal sanction public opinion also exercises a certain pressure. But would many debtors so conduct themselves? The Decree of 9/22, xi., 1906, placed the peasant members of the village communities in an exactly similar position. The members of a village community mutually bind themselves to divide the land, after a certain interval, amongst all equally; who will gain and who will lose is unknown when the agreement is made. But the nearer the time of reckoning approaches the clearer it becomes to everyone who will have to pay the bill when it falls due. At this point comes the legislator and says to the losing members: If you are docile and renounce for ever the village community which I detest, you can keep the land which otherwise you would have to give up. Is it to be wondered at if such exhortations take effect? Is it not rather a matter for surprise that in many districts the demoralising influence of such a law has been resisted? Thus, for instance, in the province of Archangelsk, where, according to the statistical estimate of 1905, there are over 50,000 cultivators belonging to the village communities, not a single person has given notice of withdrawal. In other provinces, too, in the north and north-east, the number of withdrawals is quite small.

Unfortunately a detailed analysis of the figures is difficult on account of the lack of accurate information. The official publications are prejudiced, and consequently untrustworthy; moreover, they are exceedingly scanty and somewhat confused as regards the grouping of the figures. All attempts from unofficial sources to throw light on the matter are opposed by the Government: the fight against the village community is regarded as a political matter, and every possible means is taken to prevent the opponents from securing the material necessary for resistance to the Government policy. But the break-up proceeding in the country

districts is so extensive that much comes to light in spite of everything.

In answer to the question which amongst the peasants are availing themselves of the Decree, two main classes of persons can be distinguished who are withdrawing from the village communities: those for whom the provisions of the Decree were directly calculated—the cultivators who would have to give up land at the next re-division, which land they thus retain for themselves; and secondly, those members of communities who have been separated from their native soil, industrial workers who live far from home and let the land assigned to them, or even allow it to lie fallow, emigrants who are intending to move to the Far East, and so on—these withdraw from the village community in order to sell the land belonging to them, a transaction in which they are generally cheated, and employ the proceeds profitably elsewhere. The greater number of those who withdraw are included in these two classes. But there are also ruined individuals who eagerly seize the opportunity to turn their rights of membership into money, and spend the sum received at once without troubling about the future. Cultivators who withdraw from the village community although they have no fear of seeing their holding decreased at the re-distribution, are few in number; some of them are influenced by the instability of the position in which those who hold to the community are placed by the continual succession of withdrawals; others, indeed, by a conscious preference for individual ownership as compared with the communal system. The number of these latter is, however, very small; of this there is evidence in the fact that the withdrawing cultivators very seldom avail themselves of the opportunity afforded them of receiving their land in a single piece, regardless of the pressure put upon them to do so, and of the numerous advantages which would fall to their lot. The total number, up to I, vi, 1910, of those who had had their holdings assigned to them in one place did not amount to 50,000, and was hardly 3·8 per cent. of the cultivators who had actually withdrawn; in many provinces the number is so small that it can only be expressed as a fraction of one per cent. It is, moreover, characteristic of the mental attitude of the persons withdrawing that cases arise where a portion of land is demanded from the village community for children born subsequently, hence a clause has been introduced into the law of 14/27, vi, 1910, which expressly states that the withdrawing member forgoes all further claims.

The expectation that the new law would lead to the growth

of a race of peasant proprietors, in sound economic position, who would side politically with the land-owning nobility, and would form an outpost to resist the attacks of the peasants with their demand for "more land," has been in general so little fulfilled that of late the zeal displayed in the fight against the village communities seems noticeably to have declined. This gradually spreading reaction is aided by the fact that the other hopes bound up in the dissolution of the village communities have been but poorly justified, and, at the same time, much has come to light which compels serious reflection upon the results of the step so hastily undertaken.

The dissolution of the village communities, it was always said, would smooth the way for agricultural progress—this was the characteristic contention of those defenders of the Government policy who felt an awkwardness about openly advocating the political aspect of the matter. It was even sought to justify the transference to ownership of slips of land lying at random (see above, p. 185), which was permitted in order to facilitate the break-up of the village community, by saying that the intolerable position resulting therefrom would force on a combination of portions, which would otherwise be delayed for a long time, and would thus be of service to technical improvements. But what has happened? The intolerable position is there. But so for the most part has it remained, since the next step in prospect, that of combination, has not followed.

The existing position does not, it is true, exclude technical progress. In many districts at the present moment gratifying successes are being attained by the peasant cultivators. The years of political disturbance and agrarian unrest have been followed by a strong psychological reaction; the intense emotions of that time stirred the sleepy peasantry to the depths, and agricultural work is now profiting by the awakening of energy. The recent success of co-operation in the country and the zeal with which instruction in farming methods is received, testify to this. If the work of instruction were not hindered by the lack of understanding amongst the reactionaries who control home administration, a rapid improvement in husbandry might have been counted upon with apparent security. But the Decree of 9/22, xi, 1906, deserves no credit in the matter. On the contrary, the fact that so many strips held by former members of the village community are now scattered over the communal fields, has made improvements in husbandry much more difficult.

Thus there are not many positive advantages to be reckoned

in favour of the Decree of 9/22, xi, 1906, either from the economic or from the political point of view. In addition, serious demerits must be reckoned against it.

First must be noticed the irritation and mutual hatred which have been aroused amongst the peasants. The injustice done to the poorer members of the village communities—owing to the conditions established by the Decree—by the withdrawal of the members better provided with land, has roused a bitterness which is increased by the one-sided partisanship of the “strong” shown by the administration—a partisanship which does not shrink on occasion from actually harsh interference; for instance, in many districts cases are known in which the more influential opponents of the Decree have been arrested and expelled. The withdrawing members are the objects of general hatred; in the first place, every effort is made to prevent them from carrying out their intention; and their subsequent life is made so unpleasant that after a time they may even beg to be readmitted into the community. Violence of all kinds, arson, and so forth, are now the order of the day, and it will be long before the irritation is allayed. This state of things may, it is true, be regarded as politically satisfactory, for the mass of the peasantry is divided, and, no doubt, internal quarrels have crippled their power of opposing the estate owners. But we can hardly credit the champions of the Government action with such a Machiavellian *divide-et-impera* policy. To a statesman not entirely blinded by class interest this effect of the Decree will alone suffice to make what has been done an occasion for regret.

But there is yet more to be taken into account. The differentiation of the peasantry places on one side the strong and on the other the mass of weaklings. The latter, as well as the former, must be considered before a final judgment can be pronounced. With regard to those amongst them who hold to the village community, it is at once evident that they gain nothing by the Decree, since, deprived of a portion of their land, they are, in addition, disturbed in the management of the rest. And to the class of weaklings belong also those cultivators who withdraw and sell their land subsequently. Unfortunately, the statistical evidence available on this point is especially unsatisfactory. But such evidence as exists leads us to suppose that the number of such cultivators is very considerable, although the years after the Decree came into force were very favourable to agriculture, the harvests being good, and in some cases very good. It is true, indeed, that the abandonment of the portion of land

obtained from the village community does not involve financial ruin for all those who withdraw. But even when this is remembered, it cannot be denied that the fight against the village community has already greatly swollen the ranks of the propertyless proletariat, and will swell them still more in the future; we only need to consider the times of bad harvests, when the possibility of obtaining money through the sale of land will lead to numerous withdrawals. Where can the numerous individuals thus added to the proletariat find occupation in view of the undeveloped condition of industry in Russia? The Government is now trying, it is true, to encourage emigration to Siberia and Central Asia; but the power of absorption possessed by the Russian Asiatic territories is limited. In 1909 a maximum number of 600,000 emigrants was reached; but in the following year the number shrank to half this, and in 1911 it was yet smaller. And of what importance are even 600,000 in comparison with the millions under consideration?

The position is rendered yet more hazardous by the fact that there is no organised system of poor relief in Russia. The relief of the poor has depended in the past, as regards the greater part of the population, upon the village communities; even in the case of industrial workers the village community has been their refuge in times of unemployment and in old age. Now all this must be abruptly changed. The bonds of the communal system have been broken; but to provide for their replacement by anything else has been forgotten. In the nervous haste with which, for political reasons, the destruction of the village community was determined upon, there was no time to consider such a question.

Now, however, reflection is gradually making itself felt. The country begins to realise that things are going wrong. We can only hope that the inevitable reaction may not be too long delayed, and that, when it does come about, it may not be too violent or go further than it ought in the attempt to remedy what has already happened.

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CONTRIBUTIONS TO THE THEORY OF RAILWAY RATES.—III.¹

SECTION II.—MONOPOLY VALUE.

THE classical economists rather anathematised than analysed monopoly.² It was reserved for Cournot to cultivate this neglected branch of economics; gathering the first fruits of the mathematical method. Cournot and his mathematical successors have fully discussed what may be called the leading case: that of a monopolist dealing with a whole class of mutually competitive customers at one and the same price. Some acquaintance with the laws governing this comparatively simple case is here presumed. My contributions are directed to a subject less generally studied and more specially related to railway rates,³ the case in which the monopolist *discriminates* between different classes of customers. I build upon the foundations laid by Dupuit.⁴

The corner-stone of this building is formed by a conception which Dupuit introduced under the designation “rente des acheteurs”: the money-measure of the benefit accruing to purchasers from obtaining articles which they purchase at a certain price, while they would have been willing to give more for those articles rather than go without them altogether. This concep-

¹ See ECONOMIC JOURNAL for September and December, 1911.

² For instance, Adam Smith's dictum, “The price of monopoly is upon every occasion the highest which can be got” (*Wealth of Nations*, Book I, Chap. vii.), J. S. Mill's dictum, “Monopoly value does not depend on any peculiar principle, but is a mere variety of the ordinary case of demand and supply” (*Political Economy*, Book III., chap. ii. § 5), seem wanting in precision.

³ Discrimination, it has been well said, is “the vital principle of all railroad tariffs” (Henry Fink, *Regulation of Railway Rates*, p. 120), “the secret of efficiency of American railroads” (Hugo Meyer, *Government Regulation of Railway Rates*, p. 457).

⁴ See his epoch-making papers, *De la mesure de l'utilité des travaux publics* and *De l'influence des péages sur l'utilité* in the *Annales des Ponts et Chaussées*, 1844 and 1849, which will be found among the periodical publications in the library of the British Museum. Some extracts from Dupuit's papers are given in my article in the ECONOMIC JOURNAL September, 1910.

tion may seem more appropriate to our fifth section, which is to deal with the art of regulating rates for the benefit of society, rather than to our second section, which deals with the theory of value. But the sum of money designated by the term in question may, I think, be an object of science as well as the sum designated by the more familiar term *price*. The monetary equivalent of total utility may be as objective as the monetary equivalent of final utility. It should be observed, too, that the *Rente des Acheteurs* with which we are here concerned does not consist only of *Consumers' Surplus* in the phrase adopted by the second founder of the theory, but also of a certain *Producers' Surplus* which consists of money, and does not require, like *Consumers' Surplus* for the most part, to be evaluated by an unusual or hypothetical transaction. Thus, if a railway lowers the rate for carriage of coal to a residential and manufacturing town (dependent on that railway for its supply of coal), not only will there be a gain of *Consumers' Surplus* to those who use coal for domestic purposes, but also the manufacturers becoming able to extend their use of coal in various directions will presumably secure a greater surplus of money profit. I propose to subsume the two kinds of advantage which may accrue to the purchasers of railway services under the title "Customers' Benefit."

The theory which I attempt to construct is based mainly on the first principle of pure economics, the prevalence of self-interest. In the words of Professor Cohn, comparing the different motives by which railway managers are actuated, "by far the weightiest are assuredly the egoistic motives."¹ In the words of another high authority,² "the constant effort of every railway company [is] to secure the volume of traffic and to maintain the fares that will jointly yield maximum net profit." "The main purpose of the railway manager is to secure present or prospective profit for the stockholders."³ But while reasoning from this premiss, I do not forget that a concrete railway company is far from being a perfect monopoly; and I will point out how the deductions from the abstract principle require to be modified by other considerations.

(1) *Discrimination due to differences in demand.*—The most

¹ "Weitaus die wichtigsten sind allerdings die egoistischen." *Englische Eisenbahnen*, Vol. II., p. 898, and context adducing evidence that "das Eigennutz" is the predominant motive.

² Johnson and Huebner, *Railway Traffic and Rates*, p. 227. The words relate to passenger traffic, but may safely be generalised. Compare the context, p. 216. A qualification of this assumption, made by the distinguished writers, will be noticed in the sequel.

³ *Op. cit.*, p. 228.

characteristic case of discrimination resulting from monopoly occurs when different charges are made for like commodities solely on account of differences in value to the purchaser, and quite irrespectively of differences in cost to the producer. Examples of this case too familiar to require citation occur throughout the wide fields of railway practice¹ designated by the terms Classification and Local Discrimination.

To explore the consequences to the customers of such discrimination, let us at first suppose that no very great difference of rates—no “wrench in commercial conditions” in the phrase of an experienced railway manager²—is caused by the introduction of the discrimination. Let us further provisionally assume that the company’s interest in the two kinds of traffic—say through traffic and local traffic—is not very unequal. We have then the typical case which I have discussed at length in a former paper.³ It is there shown that the perfectly self-interested monopolist tends to exploit the customers in such wise that their last state will be worse than their state prior to discrimination. But, as it is further shown—by an extension of a theorem pointed out by Dupuit and applied by M. Colson—the monopolist has not much interest in pushing his exploitation up to and beyond the limit at which discrimination begins to be detrimental to the customers as a whole. For a small consideration the monopolist can probably be induced to adopt a set of prices such that the customers as a whole—as well as the monopolist himself—may be gainers through discrimination.⁴ If he does not insist on extracting the uttermost farthing, if he lets the *pence* take care of themselves, discrimination must result in an increase of Customers’ Benefit.⁵

¹ As shown by all intelligent writers on the economics of transportation, with particular lucidity by Hadley and Acworth.

² E. P. Ripley in the context of a passage quoted in the sequel.

³ *Applications of Probabilities to Economics*. II.—ECONOMIC JOURNAL, September, 1910.

⁴ The instances of discrimination alleged by Schipfer in his interesting study on the passenger service of Prussian railways (*Volkswirtschaftliche Studien*, Berlin; Heft 209) as detrimental to the public—for instance, between “return” and ordinary fares—are hardly relevant here, so far as the allegation rests on the difference in the value of money to different classes of the community. This is a consideration pertaining to our fifth section, and not taken into account here.

⁵ This last proposition is a new corollary, which the mathematical reader will have no difficulty in deducing from the *fact* given in the paper of 1910; upon the assumption not only that the coefficients α , β , γ , etc., pertaining to the demand curves (*loc. cit.*, p. 459, note) are small, but also that the monopolist takes no account of amounts (of profit) less than what correspond to the squares of those small magnitudes. The corollary, it may be observed, is true independently of the form of the demand-function, since in the expansion of those functions the terms involving higher powers than the second may be neglected.

As we leave the limiting case in which the receipts prior to discrimination are nearly equal and the discrepancy in prices produced by discrimination is inconsiderable, the probability in favour of the conclusions enounced becomes weaker.¹ The lamp of Probability is dimmest when the inequality between the original demands is considerable, but not immense. Penetrating this obscure central region we emerge into daylight² as we approach a new limit characterised by the extreme inequality of the receipts prior to discrimination. One class has now so small a demand, in the absence of discrimination, that the alteration of its price does not sensibly affect the other class constituting the bulk of the customers (prior to discrimination). There are two varieties of this extreme case; the rate fixed for the exceptional class may be either raised or lowered. An example of the first variety would occur if millionaires were treated as *corvéable à discretion*, in Mr. Acworth's phrase. But probably in the management of railway traffic this variety is much rarer than the converse one in which rates are lowered for outlying classes. This category includes the cases in which judicious managers "create traffic"³—"excursion business, handled at reduced fares,"⁴ in contrast to "the regular business at standard fares,"⁴ "extra traffic that will not move without special conditions."⁵ Here we may place walking and cycling tickets, week-end, and "long-date week-end" tickets,⁶ special terms offered to passengers on the occasions of exhibitions, football matches, &c.; with like discrimination in favour of producers. Now in all such cases there is a pure gain of Customers' Benefit; since by hypothesis the position of the bulk of the customers is unaltered, while the remainder are enabled to purchase a commodity of which the price was previously preventive.

¹ *Loc. cit.*, p. 458.

² Theoretically the light does not return until we have crossed the new limit into an outlying region occupied by customers who have no demand at the original (undiscriminated) price. But practically it may be often assumed that the very small demand of a special class will not have a sensible effect on the rates fixed with regard to the demand of the majority.

It may be observed that a part of the outlying region which now comes into view is essentially different from that which we have been hitherto considering in this respect, that it admits of discrimination being practised in a *régime* of competition.

³ See the lively directions for creating traffic quoted by Johuson and Huebner, *Railway Traffic and Rates*, vol. ii. p. 197.

⁴ *Loc. cit.*, p. 221.

⁵ *Loc. cit.*, p. 189.

⁶ Many such instances are given by H. Marriott, *The Fixing of Rates and Fares*, Chap. vi. Perhaps some of the instances are not quite at (or beyond) the limit under consideration. (Above, note 2.) Thus, the demand for week-end journeys might well be so great and of such a nature that, if special week-end fares were to be abolished and a uniform fare adopted, that undiscriminated charge would be—practically, as well as theoretically—lower than the present standard fare.

(2) *Discrimination due to differences in cost.*—An equally simple and perhaps more familiar case arises when two classes of customers¹ between whom it is proposed to discriminate have the same demand for a commodity which it costs more to supply to one than to the other. For instance, the two classes may be the residents in two localities, whose dispositions with respect to local journeys are identical; but the operating expenses² may be greater—say on account of the steepness of the gradients—in one place than the other. The reader will rightly presume, though probably for the wrong reason,³ that when the price of the two services is not constrained to be uniform, the price of the service which it costs more to supply will (theoretically) be higher. But preconceptions will be of little avail to answer the question whether under the circumstances the customers as a whole will be benefited by the discrimination. The Ricardian doctrinaire will presume that prices corresponding to costs of production form the best possible arrangement. The undisciplined Socialist may presume that equal charges for classes whose wants are identical are productive of maximum satisfaction. But both these contrary presumptions are incorrect. The first thesis is *only probable*; the second is false.

Let us at first entertain a simplification which the path-breaker Gossen employed with success,⁴ the supposition that the "demand-curve" with which we are concerned consists of a straight line. If the demands of the two classes are equal prior to discrimination, it may readily be admitted that the consequences of discrimination will be to raise one price and to depress the other by an equal amount. If now the demand was perfectly inelastic, represented by a perpendicular line in the construction which Dr. Marshall has made familiar, the gain to one class of customers would be exactly balanced by the loss to the other class. But, of course, it is impossible that the "demand-curve

¹ It may be well to repeat here the advertisement which I gave at the outset of the cognate paper in the ECONOMIC JOURNAL for 1910:—"I shall for convenience of enunciation confine my statements to the variety in which only two species are discriminated; but the propositions thus enunciated are readily adapted to any finite number of species."

² The general expenses are not relevant to the present theory.

³ On the strength of Ricardian premisses inappropriate to the present enquiry which relates to pure monopoly. The true reason is to be found in Cournot's theory concerning the effect of a rise in cost of production on the price of a monopolised commodity.

⁴ The simplification has been employed with less caution and success, I think, by Launhardt in his *Mathematische Begründung der Wirtschaftslehre*, and his *Theorie der Tarifbildung der Eisenbahnen*, published in the *Archiv für Eisenbahnen* (Berlin), 1890, and I believe embodied in a separate book, which I have not seen.

should be perfectly inelastic at the point of equilibrium in a *régime* of monopoly. The demand line then must be sloping; and accordingly the gain to the customers for whom the price is lowered must be greater, and the loss to the customers for whom the price is raised must be less, than what it would have been for each on the supposition of perfect inelasticity. But the total result to Customers' Benefit on that supposition would be zero; therefore, in fact, the total result is positive gain to the customers as a whole.

When we remove the assumption that the demand-curve may be represented by a straight line, certainty of gain is replaced by probability. As we relax the suppositions that the inequalities in the costs of production and in the amounts demanded by the two classes are small, the probability becomes weaker, or, at least, less serviceable. But it still subsists.¹

¹ First let the demand-locus (common to the two classes of customers) be a right line; the amounts purchased of the two species of commodity being before discrimination equal; say the amount a at the price b . Let the average cost of production per unit be bk (constant general expenses being left out of account). If, as in a former paper (*ECONOMIC JOURNAL*, September, 1910, p. 446), we write for the amount demanded $a(1+\xi)$, and for the corresponding price $b(1+\eta)$; the demand-curve will now be $\xi = -\frac{1}{1-k}\eta$ (*loc. cit.*, p. 460, note). The monopoly profit will be

$$2ab[(1+\xi)(1+\eta) - k(1+\xi)];$$

which is, as it ought to be, a maximum when $\xi=0$, $\eta=0$.

After discrimination the two demand-curves remain identical; but the costs are distinguished: say $bk(1-\beta)$ for one class, and therefore $bk(1+\beta)$ for the other class; where β is a small fraction. Thus the monopoly profit which is to be maximised is (proportional to) $(1+\eta_1)(1+\xi_1) - k(1-\beta)\xi_1 + (1+\eta_2)(1+\xi_2) - k(1+\beta)\xi_2$, where $\xi_1 = -\frac{1}{1-k}\eta_1$, and ξ_2 has the same relation to η_2 . Substituting for the ξ 's their values in terms of the η 's, we find for η_1 and η_2 the prices at which the monopoly profit is a maximum, respectively, $-\frac{1}{2}\beta k$ and $+\frac{1}{2}\beta k$. These values are now to be substituted in the expression for the addition to Customers' Benefit due to discrimination, namely, $-\eta_1 - \int_0^{\eta_1} \xi_1 d\eta_1, -\eta_2 - \int_0^{\eta_2} \xi_2 d\eta_2$ (\times a constant). The result is (proportional to) $+\frac{1}{4}\frac{\beta^2 k^2}{1-k}$, that is, positive gain.

Next let us introduce inequality in the demands. Accordingly let the demand-lines become

$$\xi_1 = +a - \frac{1+a}{1-k}\eta_1$$

$$\xi_2 = -a - \frac{1-a}{1-k}\eta_2$$

(*loc. cit.*, p. 458); where a is a small fraction. By parity of reasoning we find the addition to the Customers' Surplus due to discrimination to be (proportional to)

$$\beta k + \frac{1}{4}\frac{\beta^2 k^2}{1-k}.$$

This expression consists of two terms, one of which is necessarily positive; the other is either positive or negative, according as the signs of a and β are the same or different. Now these coefficients may be considered (in the absence of special knowledge) as assuming, in the long run of different cases, every degree of (small) value.

(3) *Discrimination due to differences in both demand and cost.*—Now let us compound the two preceding simple cases. For instance, the discrimination between first- and third-class passengers' fares (in England) is based partly, perhaps mainly, on the different requirements of the passengers, and partly also, I suppose, on difference in the costs of equipment. In this case the same line of cleavage separates the classes which are discriminated in respect of demand and in respect of cost.¹ More generally, it may be conceived that the two classes differing in one of those respects, for instance, the residents in the two localities for which the cost of carriage was different,² have a uniform demand only on an average; each class capable of being broken up into species, such as travellers by fast and by slow trains. We may then employ first one of the above propositions, then the other, to obtain conclusions analogous to those which have been enounced.

It remains to notice the modifications of the simple propositions which arise when we introduce *correlation*³ both of demand and cost. For instance, the demand on the part of passengers for first-class and that for third-class accommodation are *rival*. The demands for the carriage of the passengers themselves and for the carriage of their luggage (where, as in Prussia, a separate charge is made for luggage) are presumably *complementary*. In the case of special tickets for "parties"⁴ we have an instance of *complementary demand*, so far as the desire of each for the trip is heightened by the pleasure of company; and of *joint cost* so far

positive or negative. Accordingly the addition to Customers' Surplus is *probably*, for slight, or rather (in the sense referred to in the note⁴ to p. 205 below) "incipient," discriminations *positive*.

Next let us introduce the concrete circumstance that the demand-locus is not linear, but say of the form

$$\xi = -\frac{1}{1-k}(\eta + l\eta^2 + m\eta^3 \dots);$$

the monopolist being supposed to neglect amounts (of profit) of an order less than the third powers of the η 's (corresponding to third powers of the coefficients α , β , etc.). The costs of production being as before, there again results for the addition to the Customers' Surplus an expression of the form $P + Q$; where P is essentially and always positive, and Q may be either positive or negative (through a range of values which may be regarded as of the same order as P). By parity of *a priori* reasoning this result is *probably* positive.

The reasoning may be extended to the cases in which the cost per unit is no longer constant, and to further complications.

¹ This case has been treated in my former paper: *ECONOMIC JOURNAL*, Vol. xx. (1910), p. 459.

² Above, p. 202.

³ The term is defined and divided in the *ECONOMIC JOURNAL*, Vol. vii. pp. 58, 54.

⁴ For instances of such arrangements, see the passages of Johnson and Huebner's *Railway Traffic and Rates*, quoted above, p. 201.

as the largeness of the party enables the economies of production on a large scale to be realised.¹ But it will not be necessary to examine in detail the variety of cases which are constituted by these complications. The subject is particularly open to the remark which Mill quotes from Montesquieu: "Il ne faut pas tellement épuiser une chose qu'on ne laisse rien à faire au lecteur." The reader is invited to ascertain for himself, with the aid of the notes in the former paper,² that the propositions above proved for the simpler cases of demand and supply may be extended to cases complicated by Joint Demand and Cost; the probability becoming more *a priori* and of less practical service as the complications increase. The mathematical reader will have no difficulty in making these generalisations if he bears in mind the essential characteristics of our theory, namely, (1) that monopoly profit is at a maximum³ (before and after discrimination), and accordingly, that the data must be such as to fulfil the usual criteria of a maximum; (2) that the coefficients which determine the extent of the discrimination are, at least, initially small;⁴ (3) that the usual postulates of *a priori* probabilities⁵ are granted; in particular, it is assumed that if two quantities P and Q take on from time to time different values (ranging through tracts of the same order of magnitude), such that P is always positive, Q as often positive as negative, then (under the circumstances

¹ See, as to the relation of Joint Cost and Increasing Returns, Section I. sub-section 15, of the present essay (ECONOMIC JOURNAL, Vol. xxi. p. 560).

² ECONOMIC JOURNAL, Vol. xx. p. 452, *et seq.* The treatment of Joint Cost is exemplified below, p. 212, *note*.

³ In accordance with the fundamental premiss postulated above, p. 199.

⁴ Relatively small (such as the coefficients α , β , etc., employed in the note to p. 204 above); partly in accordance with the practice of railway managers (alluded to above, p. 200), but principally in virtue of a method of reasoning introduced by Cournot and largely applicable in mathematical economics; as to which see ECONOMIC JOURNAL, Vol. xx. p. 289, and references there given.

⁵ As to *a priori* Probabilities, see ECONOMIC JOURNAL, Vol. xvii. p. 227, and references there given. In the case specified in the text it is assumed that the frequency with which P and Q assume different values in the long run (between certain limits) is approximately uniform, in accordance with common experience as to the behaviour of statistical quantities (the sort of assumption approved by Karl Pearson, *Grammar of Science*, p. 146, 2nd edition).

The argument in the text may be illustrated by the following transaction:—Two digits are taken from mathematical tables at random, or from the expansion of such a constant as π . I (1) give you a number of shillings equal to the *first* digit, and (2), according as the *first* digit is odd or even, either I give you or you give me a number of shillings equal to the *second* digit. In the long run, formed by a series of such trials, you would stand to gain. The proposition remains true when the ranges of the two elements are different; for instance, one of the two component digits being excluded from the values 8 and 9. But the proposition is of course less useful when the order of the constantly positive element is small compared with the element of inconstant sign.

characterising the class of problems with which we are dealing) the sum $P + Q$ is probably positive.

With reference to the complex cases, it may be well perhaps to explain what is implied in my use of the evasive term Joint Cost. When it is said in the present context that two discriminated commodities have a joint cost, it is meant that when the production of one is increased by an amount such as that which results from the discrimination contemplated,¹ then the increased production of the other commodity becomes less costly. It is true that most of our examples seem to imply Joint Cost on a different scale. Thus, the two parts of the same railway which were instanced in our second subsection would, no doubt, have a joint cost in virtue of the initial expenses of the railway. But we might equally have supposed two distinct railways, owned by the same company, similar as to the requisites of customers, differing only in that the cost of haulage is greater on one of them than in the other. So with respect to our first problem we might suppose two separate lines (owned by the same company) on one of which lime destined for agricultural purposes, on the other lime destined for architectural purposes is hauled, at different rates, though the cost (per ton) of haulage is the same.

It thus appears that the distinction drawn by Professor Taussig² between the discrimination resulting from Joint Cost and that which results from Monopoly, however important in general, is not particularly relevant to the benefit accruing to customers which we have in view. This sort of benefit may be obtained from discrimination without Joint Cost in a *régime* of Monopoly, and with Joint Cost in a *régime* either of Monopoly or of Competition. Our withers are unwrung by the observation that "people constantly confuse the principle of joint cost with monopoly. To charge what the traffic will bear under the former principle is for the public interest, to charge what it will bear under the latter principle is against the public interest."³ The public interest which most writers outside the school of the *Ponts et Chaussées* connect with joint cost and discrimination of price is the circumstance that but for such discrimination the production is apt to be unprofitable and therefore impossible.⁴

¹ As to the propriety of specifying the magnitude of the "dose" considered with reference to Joint Cost, see the first section of these Contributions, *ECONOMIC JOURNAL*, Vol. xxi. pp. 563, 565, *et passim*.

² *Quarterly Journal of Economics* (1891); reprinted in Ripley's *Railway Problems* (p. 140, *et seq.*).

³ Taussig, *Principles of Economics*, Vol. ii. p. 495. Cf. our subsection 7, below.

⁴ As in the "oyster-case" which Principal Hadley has made classic; referred to in our first Section, *ECONOMIC JOURNAL*, Vol. xxi. p. 564.

But the public interest which I here, after Dupuit, emphasise, is one quite distinct from that familiar advantage. It is sometimes, indeed, superadded thereto, but it often exists independently. It consists in minimising through discrimination that loss (*perte sèche* in M. Colson's phrase) of customer's benefit which is apt to result from unitary price. Doubtless competitive joint-cost is more in the public interest than monopolistic joint-cost, other things being the same. But other things are likely not to be the same, since monopoly is more favourable to discrimination.¹

(4) *Changes in demand*.—Having now considered the influence of demand and cost as determining discrimination, let us go on to consider changes in those factors.² The question arises how will a change in the demand for one of the commodities discriminated affect the result of discrimination. The change may be supposed, with sufficient generality, to occur *after* the introduction of discrimination. The commodities which we have hitherto considered may be likened to two horses of different mettle at first yoked together and constrained to go at one and the same rate; afterwards unyoked and free to go each at its own pace. The question now arises, if, after the separation, one of the steeds be either spurred or reined, what will be the effect on the rate of the other? The metaphor suggests the true answer, namely, *nil*, in the absence of special relations, whether of rivalry or sympathy. Thus, if a Company has been free to adopt the rates that are most profitable at different distances (say, arbitrarily tapering rates), then should a fall in the demand for through traffic occur, through the construction of a competitive line passing through a distant point, that circumstance *per se* will not theoretically affect the fares for shorter distances. They had already been fixed at the amounts supposed to be most profitable; to alter them on account of some loss occurring elsewhere would mean but an additional loss of profit.

This deduction from abstract theory is at variance³ with the judgment of experts.

¹ As to the possibility of monopoly being better for the customer than competition, see *ECONOMIC JOURNAL*, March, 1911, p. 143.

² The relation between the following two subsections and the preceding three may be illustrated by the relation between § 2 and § 5 of Mill's Chapter on *International Values*, dealing respectively with the level of values resulting from the opening of trade, and the change in the level resulting from a variation of the data.

³ The proposition here traversed may sound similarly, but is not similarly sound, as the following. If before the fall in demand for the through service there had existed a hard and fast mileage service, then indeed the introduction of a differential price for the through traffic might tend to raise the rates for shorter

Thus, the experienced Albert Fink testifies that a hard and fast tariff (preventing discrimination)

"would have the effect that they would have to increase their charges upon such portions of the road as they could control themselves." (Report of the Hepburn Commission, Vol. I., p. 68.)

So in the classical pages of C. F. Adams we read :

"At one point" rates became almost literally nominal; residents "at other points would be charged every penny that they could be made to pay without being drawn off the railroad and back to the highway." (*Railroads*, 1878, p. 123.)

The high authority of Professor W. Z. Ripley may be quoted in favour of the prevalent doctrine :

"In the constant pressure for reduced rates in order to widen markets, it is not unnatural that the intermediate points, less competitive probably, should be made to contribute an undue share to the fixed sum of joint costs." (*Political Science Quarterly*, Vol. XX., 1906; *Railway Problems*, p. 489.)

And, again, Professor Ripley speaks of

"the danger of local rates . . . being actually enhanced, or at least prevented from reduction because of an unduly low level of competitive rates at more distant points." (*Quarterly Journal of Economics*, 1909, p. 481.)

To the same effect the acute H. Turner Newcomb :

"To these stations the relation of the railway is that of a monopoly, and from them the latter can and will . . . recoup all losses that may be sustained." (*Railway Economics*, p. 47.)

"Competition at terminal points impels most railways to charge relatively high rates at intermediate points, the traffic of which cannot be directed to other lines." (*Op. cit.*)

How strongly this doctrine of recoupment recommends itself to enlightened common-sense appears from its continual recurrence in the reports and decisions of the Inter-State Commerce Commission. For example :

"The greater the departure from the direct line, the greater would commonly be the necessity for lower rates on through traffic, and the greater the liability to have the charges on the local traffic increased to make the carriage of through traffic possible." (Quoted from the Decisions of the Inter-State Commerce Commission, Vol. I., by Hugo Meyer, *Regulation of Railway Rates*, p. 355.)

Through rates "must not be so low as to burden other business with part of the cost." (Inter-State Commerce Commission, Third Annual Report, p. 126.)

distances. Or, if after the fall in demand for the through service, there were imposed (by an external authority) a mileage rate (or other hard and fast relation between the rates for long and short distances) then the rates for short distances, though they might not have been lowered by the first change, would tend to be raised by the second change. So far as the dicta here questioned imply these propositions *cadit quaestio*.

"If the rate is too low upon one article, in the end other articles pay too high a rate." (Quoted by Ripley, *Railway Problems*, p. 466.)

And who pays for this loss [occasioned by a roundabout service to competitive points?] "Ultimately the intermediate points." (*I.C.C. Annual Report*, Vol. xi., p. 45.)

A similar contradiction between abstract theory and expert judgment may be noticed with respect to the practice of giving free passes to passengers. Theoretically, if from a homogeneous¹ body of customers some are selected to pay for their journeys by some service to the general interests of the company, that variation of the terms for certain passengers does not *primâ facie* affect the rate for the other passengers; what was before the rate affording maximum profit still fulfils that condition.² But this theory is not in accordance with common opinion. Thus, the Cullom Commission complain (*inter alia*) :

"that the cost of the passenger service is largely increased by this abuse" [the granting of passes]. (P. 180, quoted by the Elkins Commission.)

So A. B. Stickney :

"to charge one person two prices for the sake of carrying another free" [seemed outrageous]. (*Railway Problems*, Ch. VIII.)

So the Inter-State Commerce Commission :

"Favoured persons have been furnished free transportation at the expense of the general public by higher general charges to reimburse for gratuitous carriage." (*Annual Report*, III., p. 12.)

These antinomies between abstract reasoning and common opinion appear to be due principally, but perhaps not altogether, to the admitted inadequacy of the premiss stated at the outset, and so far employed without correction.³

¹ If, as it is sometimes objected, the favoured persons belong to the wealthier classes (and so have a higher effective demand for passenger service)—"men of wealth and prominence who rode at the expense of others less able to pay" (*I.C.C. Annual Report*, Vol. iii. p. 11)—then the discrimination would tend to *lower* the fares of the other passengers (by the theory of our subsection 1).

To continue our equine metaphor, we have (1) in the case of homogeneous demand a horse of like mettle with others running abreast of them at the same pace without any constraining yoke. The removal of such a one to be employed elsewhere does not tend to alter the general pace. But (2) if the steed removed is one of higher mettle, which ran at the same rate as others only through constraint, the removal of such a one tends to *lower* the general rate.

² One of the few writers whom I have found on my side in this matter is Marshall Kirkman, who enunciates what I consider the (provisionally) true doctrine in his *Basis of Railway Rates*, p. 38:—"Making of a low rate never has the effect to raise another rate. Each is independent." But I do not claim the alliance of a writer who holds that the charges "for railway service are governed by the same laws that fix the prices of other necessities"—"fish or flour" (p. 26), "what we may term God's natural laws."

³ Cf. subsections 6, 7, and 8 below.

It remains under this head to consider the special cases in which there is a *correlation*, a sympathy, or rivalry,¹ either in respect of production or demand, between the commodities for one of which the demand is changed. Thus, a fall in the demand for through traffic (owing to competition at a distant point), not met by a lowering of through rates, might be followed by a shrinkage of the through traffic, with a loss of the economies attending production on a large scale that would involve a rise of the fares for shorter distances. To exemplify correlation of demand (between the commodities for one of which the demand is altered), suppose that in a country where a separate charge is made for passengers' luggage the demand for travel increases (without any decrease in the amount of luggage required on each journey); then the demand for the carriage of luggage would be increased, and therefore presumably the charge for carrying ^a luggage might be raised.

The last conclusion requires some qualification, for it is one of the paradoxes of Monopoly as contrasted with Competition that a rise in demand, even under monopoly without discrimination, as shown in a former paper,² is not necessarily attended with a rise in price. It is thus not exactly true to say with Ricardo that "commodities which are monopolised rise in price in proportion to the eagerness of the buyers to purchase them."³ This paradox has not any important, or rather not any *recherché*, analogy under the head of cost.⁴

(5) *Changes in cost*.—The antithesis between theory and common opinion recurs when we consider the case in which the cost of transportation is changed for one of the discriminated services. In the absence of correlations there is no reason why the rate for the other service should be altered. Thus, if Government should compel railways to carry particular classes—say soldiers or workmen—at unprofitable rates, yet, supposing that the railway was previously free to fix discriminating rates at its discretion, the other classes of customers need not suffer. Because the Government smites the Railway on one cheek, is that any reason why the Railway should smite itself on the other cheek by altering fares arranged to yield maximum profit? But such is not the received opinion, which is thus well expressed by Mr. Pratt :

¹ The cases metaphorically distinguished above, p. 207.

² ECONOMIC JOURNAL, Vol. VII., p. 234.

³ *Principles*, Ch. xxx.

⁴ The analogue is the truism that an increase in the total cost of producing each amount of a commodity [Cournot's $\phi(x)$ as distinguished from his $\phi'(x)$] is not necessarily attended with a rise of price in a *régime* of pure monopoly.

"If workmen are to be regarded as a privileged class who must be carried to and from their occupations at fares or under conditions which do not pay a railway company, then it is obvious that the difference must be made up either by other classes of travellers, or by the general body of the traders." (*Railways and their Rates*, p. 41.)

So far supposing that there is no correlation between the discriminated services. Now let there be such a relation; and first, let there be a rivalry of demand as for first-class and third-class passenger service. In such a case, as I have shown at length in former papers,¹ a rise in the cost of one service may not only not cause a rise, but may cause a fall in the charge for the other service. The proposition is principally important as giving a shock to the obstinate convictions of the half-taught, who persist in transferring to a *régime* of pure monopoly the lessons which they learnt in their youth when competition held, in the books at least, undivided sway.

A similar interest attaches to a corresponding case of correlations between costs. For instance, suppose that goods and passenger services are so related, on a crowded line, that if the one is increased the other becomes more costly. Let the cost of the passenger service be increased by any cause not directly affecting the goods traffic. The Ricardian will rightly presume that the charge for passenger service will tend to rise. But he is likely to have a wrong opinion on the question whether the customers of the railway as a whole may be benefited by the change. By a parity of reasoning with that employed in the case of correlated demand, it may be shown that the increase in the cost of one service may quite possibly be attended with an increase of Customers' Benefit—more beneficial to the shippers and consumers of the goods than it is detrimental to the passengers. The proposition has some affinity to Dr. Marshall's celebrated paradox as to the conditions of maximum satisfaction.² Both theories conduce to the same purpose, to awaken old-fashioned dogmatists from their optimistic slumbers. But the analogy is not close, as appears from the observation that inelasticity of demand for the commodity of which the cost is raised is *not* a condition favourable to the effect here considered.³

ECONOMIC JOURNAL, Vol. IX., p. 287 *et seq.*; Vol. XX., p. 296.

² *Principles of Economics*, Book V., ch. xii.

³ The general truth may conveniently be conveyed by way of a particular example. In a notation similar to that employed in an earlier paper (ECONOMIC JOURNAL, Vol. XX., p. 301) let p_1 , p_2 be the prices of the two commodities referred respectively to the prices at the point of equilibrium; let x , y be the corresponding, similarly

(6) *Future interests*.—"So far we have supposed the owner of a monopoly to fix the price of his commodity with exclusive reference to the immediate net revenue which he can derive from it." I use Dr. Marshall's words¹ to mark the transition to cases in which the monopolist may alter his price "with a view to the future development of his business." The development of his own business by developing the business of his customers, at a sacrifice of present to future profit, is more readily practised by the monopolist than by the *entrepreneur* in a *régime* of competition, as the monopolist has an assurance that the fruits of his sacrifice will not be snatched by a competitor. With this view intelligent railway managers often fix rates lower than those which would afford maximum profit in the present. To encourage future traffic "a railroad operating in a new territory may for a time offer to carry freights at rates which barely cover expenses."² They may even "haul materials at a loss."³ Coal, hay, grain, measured, amounts of commodity. Let the laws of demand (not now correlated) be expressed by the equations:

$$p_1 = \frac{2}{3} + x - \frac{2}{3}xy; \quad p_2 = \frac{2}{3} + y - \frac{2}{3}xy$$

Let the (now correlated) cost of producing the quantities x and y be

$$C + \frac{1}{3}x + \frac{1}{3}y + \frac{1}{3}xy$$

(where C is a coefficient representing general expenses, which, with reference to the present operations, may be treated as constant). The values of x and y for which the profit of monopoly is a maximum are then as they ought to be, each *unity*.

Now let the (total) cost of production be increased by an expense proportioned to the amount produced of one commodity, say the additional expense τx , where τ is small. By the method explained in the former paper it will be found that the resulting increments of x and y are approximately,

$$\Delta x = -\frac{1}{14}\tau,$$

$$\Delta y = +\frac{2}{7}\tau.$$

The corresponding increment of Customers' Benefit is

$$-x\Delta p_1 - y\Delta p_2 \quad (x=1, y=1)$$

$$= -x\frac{dp_1}{dx}\Delta x - y\frac{dp_2}{dy}\Delta y$$

$$= -x(1 - \frac{2}{3}x)\Delta x + y(\frac{2}{3} - \frac{2}{3}y)\Delta y.$$

Substituting for Δx and Δy the values above found and replacing x and y each by unity, we have for the increment of Customers' Benefit $\frac{1}{14}\tau$, that is, a *positive* quantity.

More generally, as before, for $\frac{dp_1}{dx}(x=1)$ put $-\epsilon_1$, and for $\frac{dp_2}{dy}(y=1)$ put $-\epsilon_2$.

Let ρ be the coefficient of xy in the expression for (correlated) cost. By parity of reasoning with that employed in the former paper there will be found as the condition that Customers' Benefit should be increased by an increase of cost of the form τx , $\omega_2 < 2\rho\frac{\epsilon_2}{\epsilon_1}$; where ω_2 , having the same signification as in the former paper, is essentially positive; also ϵ_1 and ϵ_2 are positive; and accordingly ρ must be positive. This condition is not favoured by the smallness of $\frac{1}{\epsilon_1}$, the elasticity of demand for the commodity of which the cost is raised; *au contraire*.

¹ *Principles*, ed. VI., p. 486.

² Johnson and Huebner, *Railway Traffic and Rates*, Vol. II., p. 317.

³ *Op. cit.*, p. 366.

"are sometimes carried at less than the total expenses."¹ Freight is sometimes carried at a loss to get some other freight that will pay more.² The consilience between the interest of the monopolist and his customers, which was before seen to be approximate, seems now to be complete. There is presented an optimistic view of *dynamical* discrimination comparable to Bishop Butler's doctrine that rational self-love and universal benevolence are nearly coincident in this life and completely when account is taken of the future.

It is true, indeed, that in the words of an able writer, "traders' and railways' interests are in the long run coincident."³ But the traders of whom this is true are supposed to continue customers of the railways during the long run.⁴ But the railways prevent many traders from having a long run. In the words of the Hepburn Commission, "in a speculative attempt to increase business they favour one shipper at the expense of another."⁵ A witness admits to having "acted as a fostering mother" to one customer but not so to another—"a small concern."⁶ "A railroad has the life and death of the manufacturer in his hands," as Professor Ripley has said;⁷ and in the United States it has exercised that power unscrupulously, has ruined some in order to build up others. The American railway manager has fostered or frozen-out manufacturers, has brought on or kept back cities at his arbitrary discretion, like the ruthless agent of transportation in the nether world who, discriminating between passengers across the Styx,

"Nunc hos, nunc accipit illos,
Ast alios longe submotos arcet."⁸

It is tenable, indeed, that even in Monopoly, as certainly in Competition, *laissez-faire* is less detrimental than at first sight appears. Thus, perhaps, Professor Hugo Meyer is right when he affirms that if railway managers had had a free hand to establish "basing points" in Australia, they would have brought about

¹ *Op. cit.*

² Hepburn Commission, p. 2894.

³ ECONOMIC JOURNAL, Vol. XIX., p. 477.

⁴ The inadequacy of this supposition is strikingly illustrated by Frank Norris's story *Octopus*. But the exploitation of Dyke and other customers of the grasping Railway involved an element of fraud not here contemplated—typical of common cheats rather than common carriers.

⁵ Report, p. 64.

⁶ *Loc. cit.*, p. 62.

⁷ Report of the Industrial Commission, Vol. XIX.

⁸ "Quo discrimine," on what principle of discrimination, was the natural inquiry of an intelligent visitor; and the answer left him pondering and pitying the victims of discrimination under their hard, not to say unjust, fate (*sortem iniquam*).—Aeneid, Book VI.

that very decentralisation which has been vainly aimed at by governmental regulation.¹ Perhaps he has rightly described some evils attending unrestrained discrimination as but "growing pains."

Postponing to the final section the difficult questions just suggested, I have to add here one dark trait to the picture of dynamical discrimination. The immunity from vicarious suffering which was claimed on statical grounds² is not equally tenable dynamically. Statically, it may be unthinkable that because through traffic has become less profitable, therefore the profit of local traffic should be diminished by an alteration of rates. But dynamically, if the loss of immediate profit has disturbed the balance of present and future advantage, it is quite conceivable that local customers who were before spared for future development should now be sacrificed to present exigencies.

(7) *Action of competition.*—Several corrections of our provisional conclusions are required by the incompleteness of our first principle—the prevalence of perfect and perfectly self-interested monopoly. Monopoly is seldom perfect. In spite of agreements and consolidations,³ railways are apt to compete for the carriage of goods and persons, whether by the offer of lower rates or higher accommodation. Then there is the so-called "competition of markets,"⁴ when the customers of different railways compete against each other in one and the same market. Each railway in order to preserve and increase its custom must moderate its charges for carriage to the common market; just as an intelligent trade union will not demand a rise of wages so great as to make the competition of the employers in a foreign market impossible. I must leave it to railway experts to evaluate the extent to which these kinds of competition are effective. My analysis resembles Mr. Asquith's Coal Bill in not having any figures inserted. It is safe to say with Professor Johnson, "The railways are only partial monopolies."

As some kinds of competition prevent railways from exploiting their customers, so another kind of competition tends to prevent railways from being exploited by Governments or customers acting in combination.⁵ This is the competition between

¹ *Regulation of Railway Rates*, p. 301.

² Above, pp. 207, 210.

³ The degree of unification prevailing between American railways is well shown in the fifth chapter of Emory Johnson's *American Railway Transportation*.

⁴ Johnson, *op. cit.*, p. 65. W. Z. Ripley, "Local Discrimination," *Quarterly Journal of Economics*, Vol. 23, p. 489 *et passim*.

⁵ There is latterly much complaint that manufacturers, combined in the form of "trusts," impose hard terms on carriers.

different industries for the funds of investors. In virtue of this competition the profits of railways (and like industries¹) tend to be on a level with all the industries that are run by Companies. This is certainly an appropriate conception; but to what extent it excludes the conception of monopoly I do not feel competent to determine. Professor Taussig has assumed, provisionally at least, and for the sake of argument, that "a railroad's business is carried on under the circumstances of free competition."² Mr. Harry Turner Newcomb may be mentioned as having expressed the conception with peculiar clearness.³ It must be admitted that a railway company is analogous to, or rather identical with, a capitalist seeking the most profitable investment. But it is to be remembered that the equation of profits which is deduced from this Ricardian principle is true only over "long periods." But there is reason to think that in concerns of such magnitude as railways, the relatively "short period" is absolutely long. It is safe to say with Mr. Maurice Clark, "In the case of railroads, whatever may be the ultimate tendencies, there is undoubtedly over long periods a wide divorcing, not only of unit price from unit cost, but also of total return from total cost."⁴ During the continuance of that divorce the theory of monopoly which has been propounded is applicable.

To the extent to which the Ricardian conception of normal profits in the long run is appropriate, no exception can be taken to dicta above cited⁵ purporting that a loss by a rate at one point tends to be recouped by a rise in rates at other points. This is, indeed, Ricardo's central doctrine that capitalists finding profits below the natural level back out of this industry in such wise that, supply being contracted, prices rise and the diminished numbers in the business thereby obtain adequate profits. How far this theory is from the facts of the railway business *judicent peritiores*. It may be remarked that the doctrine of recoupment comes with more grace from an author like Mr. Pratt,⁶ who demands independence for the railways, than from those who demand that railways should be regulated, as being monopolies, with respect to actions which presuppose competition.⁷

¹ It is hoped that the reader of these pages will throughout retain in his memory what was stated at the outset (ECONOMIC JOURNAL, Vol. xxi. p. 346) that "railways" are here used as typical of the larger class of industries which have been described as "public works."

² *Quarterly Journal of Economics*, 1891, reprinted in Ripley's *Railway Problems* (p. 146).

³ *Railway Economics*, pp. 75, 78, *et passim*.

⁴ *Standards of Reasonableness*.

⁵ Above, pp. 208, 211.

⁶ *Loc. cit.*

The dicta of the Inter-State Commerce Commission in this matter of recoupment are not entirely, I think, defensible upon the grounds explained in Sect. 6 above, p. 214.

The qualification of monopoly by competition is, as we have seen, not an unmixed advantage. Not only are certain benefits of discrimination likely to be impaired, but also certain immunities from the pressure¹ of raised cost. But these benefits may well be insignificant in comparison with the advantage attending the limitation of monopolist's power to exploit his customers. The reader may be assisted in apprehending the nature of the limitation and the extent of the advantage by a reference to an earlier paper.² The conceptions there introduced seem appropriate to the position of one who enjoys a monopolistic power of discrimination, but is deterred from using it unreservedly by the prospect of competition. He may be regarded as aiming at his own maximum profit *subject to the condition* that his customers obtain a certain amount of benefit, namely, as much as, or perhaps a little more than, his competitors may offer. From this point of view we may discern more clearly than is usual the transition from the bad sense of the phrase "charging what the traffic will bear," to the good sense, sometimes awkwardly enough described as "not charging what the traffic will not bear." The *entrepreneur* in both cases discriminates prices and adjusts all manner of complicated variables to the end of securing maximum profit; but the maximum is in the one case absolute, and in the other case subject to a condition which the variables must fulfil.

To secure this beneficial result a small leaven of competition will suffice; for a reason that has been already explained, and that will be referred to again in connection with a second limitation of the abstract theory.

(7) *Altruistic motives*.—The second modification of the originally assumed self-interested monopoly relates to the *adjective*. "Here and there better motives than egoism rule," as Professor Cohn witnesses in the context of the passage which we cited as affirming the prevalence of self-interest.³ So Professors Johnson and Huebner, after defining the "main purpose" of railway managers to be that which we have so far assumed, add:

"It would be as unjust as inaccurate to say that philanthropical and social motives are not also influential."⁴

¹ An immunity to be more clearly explained under the head of Taxation; some anticipation of which under the more general conception of a rise in the cost of production is justified by high authority, that of Cournot (*Théorie Mathématique*, Ch. v.), and that of Marshall (*Principles*, Book v. Ch. ix.).

² ECONOMIC JOURNAL, Vol. xx. p. 443 *et seq.* As to the position of the partial monopolist, cf. ECONOMIC JOURNAL, Vol. vii. p. 235.

³ Above, p. 199.

⁴ In the context of the passage quoted above, p. 199.

More explicitly they observe :

"The railway official . . . may no longer, nor does he, consider himself merely as the officer of a private business corporation. He realises that he holds a dual position as the servant of a corporation and as the manager of a public service."¹

To the same effect the vigorous railway-president, E. P. Ripley, who certainly has not been influenced by any bias in favour of governmental regulation :

"It is needful . . . that railway managers shall see and frankly concede that they are quasi-public servants, owing a different and a higher duty to the public than almost any other business men."²

When asked, in the course of his examination by the Inter-State Commerce Commission, whether he would increase a discriminating rate to any extent, provided it were profitable, say by 200 per cent., he replied :

"The advance would be too great of itself. It would be too great a shock to my sense of propriety—a shock to my sense of justice."³

Doubtless in the case of Companies as of individuals, it is difficult to disentangle altruistic from egoistic motives. It is sufficiently accurate to say, with the wise Albert Fink :

"Enlightened self-interest" [dictates the exercise of power] "reasonably and in a spirit of liberality."⁴

There is also to be noticed the regard for public opinion which comes to much the same practically as regard for public welfare. Among many symptoms may be mentioned the importance attached by railway men to the proportion between profits and capitalisation. Theoretically, a Railway Company is concerned to maximise the absolute amount of profits in the present (and future) without reference to the amount of capital invested in the past. Theoretically there is nothing paradoxical about President E. P. Ripley's trenchant dictum that the making of freight "has not, never did have, never ought to have any relation to the capitalisation of railroads."⁵ But the opinion of the public, and, accordingly, the practice of the railways, is different.⁶

¹ *Op. cit.* p. 76.

² "The Railroads and the People," *Atlantic Monthly*, Jan. 1911.

³ *Report*, 3500, p. 351.

⁴ Hepburn Commission, Vol. v. *Exhibits*, p. 87.

⁵ Quoted with disapproval by the Inter-State Commerce Commission Report, 3500, p. 349.

⁶ On this controversial topic Johnson and Huebner express themselves with their usual moderation. But from the point of view of abstract theory I do not quite follow their dictum : "the claim that rates are fixed solely by commercial conditions and are not based in part upon capital and other costs of service assumes the free play of competition and the absence of monopoly." *Op. cit.* p. 376.

So far as altruistic motives act the doctrine of recoupment above noticed is less open to criticism. If a Railway from motives of liberality has refrained from charging all that some parts of the traffic will bear, it is intelligible that when straitened at other points the Management should retract its liberality. As Mr. Pratt says, "when a railway company gets an inadequate return from one department, it is much less likely to make generous concessions in another."¹

The altruistic motive need not be strong in order to be effective. An "exiguum clinamen"² from the direction of egoistic purpose may result in a considerable benefit to the customers. For by the theory of maxima a small decrement of profit from its maximum is apt to be attended with relatively large changes in variables connected therewith, in particular Customers' Benefit.³

Other corrections besides the two main ones that have now been indicated are required to adapt the rigid outline of abstract theory to human life. But these may be deferred to the section which deals with practical applications.

F. Y. EDGEWORTH

¹ See the context of the passage cited above.

² *Lucretius*, Book ii.

³ See *ECONOMIC JOURNAL*, Vol. xviii. p. 399, and Vol. xx. pp. 443, 449.

(To be continued.)

THE DEPRECIATION OF BRITISH HOME INVESTMENTS.

IN some very large fields, British home investments have been depreciating during the past fifteen years. After a long period of advance in price, broken only by slight checks, and ending in the five years 1892 to 1896 with a rapid and continuous rise, these investments took a sudden turn downwards. The decline has been very serious, especially in the case of what are commonly called "gilt-edged" investments, where it has been almost continuous and very heavy. Moreover, there is no clear sign as yet of any change for the better.

Foreign and colonial investments of a similar character have, as a rule, experienced no such depression. On the contrary, many of them, *e.g.*, railway ordinary stocks and land, have advanced in value, and the advance is still proceeding.

The problem, therefore, is a double one—we have not only to deal with a very large adverse movement of British home investments, but with a movement in which, generally speaking, foreign and colonial investments of a similar character do not share.

Again, this double problem appeals to different minds in different ways. Some are solely concerned to account for so great and exceptional a movement, while others care only to be told when it will come to an end.

A careful investigation of the facts may leave much still to be done before either of these two groups of minds is satisfied, but it is certain that no advance will be made in either direction until such an investigation has been made. It is, therefore, with the object of grasping at any rate some of the facts and giving them enough consideration to put them in due relation to each other that this paper is written. The tables on pages 222–4 show the mean market values of five groups of investments dealt in on British Stock Exchanges; the dividends paid; the average mean value of each group; its yield per cent.; and the number

of years' purchase of the dividend represented by that value. Three of the groups are home investments and two are foreign and colonial. In each case the information is repeated over a series of years. On page 221 will be found a diagram of the whole of the groups showing the "years' purchase" not only for the years given in the tables, but for each intermediate year. In selecting the investments the main object has been to include only such as an investor in 1896 who aimed at security rather than high yield would have been likely to buy. Government stocks have been neglected, partly because they have become so much a subject of political controversy, and partly because the ordinary investor was never attracted by the low yields obtainable from them. Stocks, too, which have had a long existence, undisturbed by amalgamations or drawings, were necessary for our purpose, which was to ascertain the general tendency of the market in a sufficient number of what may be termed standard investments. Mean and average prices have been taken to avoid temporary and local fluctuations. In the diagram the price movements themselves could not be used except in combination with their dividend basis, and "years' purchase of dividends" has been preferred to "yield" in order to present to the eye a movement corresponding in direction with the price movement.

An example of what the tables show may be deduced from the following figures abstracted from those tables :—

Year.	British Railway Ordinary Stocks.		Foreign and Colonial Railway Ordinary Stocks.	
	Average Mean Price, per cent.	Dividend, per cent.	Average Mean Price, per cent.	Dividend, per cent.
1896	154·76	5·235	117·88	6·200
1911	107·91	5·097	155·82	8·100

If an investor in 1896 had invested £3,000 in the British stocks at the average mean price shown above, he would have become the owner of £1,938 of stock producing £101 7s. per annum. An equal sum invested in the foreign and colonial stocks would have given him £2,545 of stock producing £157 15s. per annum. In 1911 the British stocks would have sunk in value to £2,091 and their dividend to £97 5s. per annum, while the foreign and colonial group would have risen to £3,965 and their dividends to £205 2s. 10d. per annum. The investor would therefore find that his foreign and colonial holdings are now worth nearly double the value of his British holdings, and that the former are

of invention and machinery to them, and to their being increasingly conducted on the "large scale" and to general progress.¹ The relative decrease will obviously chiefly occur in the manufacturing trades, because labour-saving devices can be more extensively applied to them. The population having increased during the twenty years by 18.84 per cent., and the textile and dress workers by only 7.46 per cent., the difference between them indicates an increased efficiency of 11.38 per cent. of persons in these trades.

An important and distinct form of trading, and to some extent manufacturing, in Textile and Dress goods is that conducted by Co-operative societies. These societies are distinct from the ordinary manufacturer and trader. A share of one pound is all the capital a member need hold, and none may hold more than £200. Membership is open to all paying an entrance fee of one shilling. The capital is subscribed by all the members, and the whole concern is controlled by them irrespective of the amount of their investments. Each member has one vote only. Thus such societies are especially available to the working class. The goods are sold at current local prices, any profit being divided among the members in proportion to purchases. The statistics which follow are the most recent available. They cannot yet be obtained for exactly corresponding years. The comparison below is for approximate periods, and shows something of the proportions and tendencies.

Year 1909.	27,380
Year 1901.	22,406

Persons 22,406

— WAS : —

This is an increase in eight years of 22.19 per cent.

The total number of persons engaged in the manufacture and distribution of Textile and Dress goods in the United Kingdom was :—

An increase in eight years of 2.12 per cent. .
The rate of increase of persons employed co-operatively in these industries is thus shown as 20.7 per cent. greater than the increase of those engaged in the same industries throughout the United Kingdom.

¹ No allowance being made, here or in the following sentences, for changes in the volume of foreign trade or in the consumption of this class of goods per head of the home population.

² Including boots and shoes, as is the case in the Census Returns of Textile and Dress Workers with which these figures are compared.

Dress Workers with which these figures are compared.

those which possessed capital amounts above the average of their class. This, it is interesting to note, was not the case with the stationary Companies of the manufacturing and retailing groups, as in each of these their capital was less than the average of its class; but also, at the same time it should be remembered it was greater than that of the companies of similar classification which ceased.

It is thus seen that the incidence of economic pressure is most heavy upon the wholesale Companies.

The Textile and Dress industries comprise all those engaged in the manufacture and distribution of the following materials: cotton, wool, silk, thread, hemp, jute, flax, and straw plait, and some leather.¹

A general outline of the position of these industries is obtained as follows. The statistics are for the United Kingdom and are the most recent available.

The total population was:—

1881.	34,884,848
1891.	37,782,922
1901.	41,458,721

The "occupied" population—i.e., professional, commercial, and industrial—was:—

1881.	14,897,884
1891.	16,544,899
1901.	18,261,146

The total number of persons engaged in the Textile and Dress industries was:—

1881.	2,659,182
1891.	2,874,697
1901.	2,867,796

The percentage of those engaged in these industries to the total population and to the occupied population was:—

1881.	1881.	1891.	1901.
Per cent. of total population ..	...	7.6	7.6
Per cent. of "occupied" population ..	...	17.89	17.3
		15.65	15.65

These figures show that the numbers engaged in Textile and Dress trades increased in the twenty years considered at the rate of 7.46 per cent., while for the same period the total population increased by 18.84 per cent. and the occupied population by 22.56 per cent.

These figures represent, relatively to population, a decrease of numbers in these trades. This is to be attributed to increased productive power resulting from the more extensive application of including gloves and boots and shoes, these being articles of dress and so recorded in the census returns.

This leaves for comparison the changes in capital of seventy-seven surviving Companies.

They are separately grouped and the aggregate capital amounts of the Companies in each division of industry, manufacturing, wholesale, and retail, are collated over the period 1900 to 1908. A similar comparison is also made of the total combined capital of the whole seventy-seven for the same period. The paid-up capitals of each group, and also the total combined capital of the seventy-seven Companies comprising them was as follows, and the calculations indicate the movements of the same.

Increase per cent. in 8 years. 25.12	Total capital of 10 manufacturing companies.		Total capital of 25 wholesale, that is, ware- housing companies.	Total capital of 42 retailing companies.	Total combined capital of 77 companies.	15.85
	Year 1900.	Year 1908.				
	£16,568,077	£20,755,669		£6,431,332	£9,945,443	
				Year 1900.	Year 1908.	8.27
				£6,065,745	£10,768,436	
				Year 1900.	Year 1908.	
				£32,964,852	£38,189,850	
				Year 1900.	Year 1908.	

The increase of the capital of the manufacturing companies, it will be seen, is 6.4 per cent. greater than that of the distributive companies, that is, than the increase of the combined wholesale and retail capital, and may be attributed to the fact that labour-saving methods and large-scale operations are more applicable in productive industry than is the case in distribution. Here it should be noted that the wholesale companies—whose distinctive function is the warehousing of goods—have the special feature that their capital increases at a much lower rate than that either of the manufacturing or of the retailing companies. This, it may be safely assumed, indicates a marked tendency to direct dealings between the manufacturer and the retailer; the effect of which would be to diminish the wholesale capital, while increasing the manufacturing capital. The increase of capital held by the manufacturing Companies is also largely due to such Companies augmenting their capital for the purpose of combining within themselves the two functions of manufacturing and warehousing. A reference to the calculations of wholesale capital on the previous page, serves to show that in the changing processes of industry the wholesale Companies which just maintain their position—that is, are stationary over the period considered—are

Manufacturing Companies.

The average capital in the year 1900 of the 14 manufacturing companies was £1,229,886. Average capital in 1900 of the 4 of these companies which had ceased by 1908 was £157,582. Average capital in 1900 of the 2 whose capital decreased between 1900 and 1908 was £794,586. Average capital of the 5 whose capital remained stationary from 1900 to 1908 was £912,000. Average capital in 1900 of the 3, which had increased their capital by 1908 was £3,519,634.

Wholesale Companies.

The average capital in the year 1900 of the 27 wholesale companies was £243,204. Average capital in 1900 of the 2 of these companies which had ceased by 1908 was £67,596. No company decreased its capital between 1900 and 1908. Average capital of the 19 whose capital remained stationary from 1900 to 1908 was £251,718. Average capital in 1900 of the 6 which had increased their capital by 1908 was £274,783.

Retail Companies.

The average capital of the 43 retail companies in the year 1900 was £233,372. The capital in 1900 of the one which had ceased by 1908 was £89,690. Average capital in 1900 of the 3 which decreased their capital between 1900 and 1908 was £94,643. Average capital of the 28 whose capital remained stationary from 1900 to 1908 was £195,610. Average capital in 1900 of the 11 which had increased their capital by 1908 was £380,328.

It is highly significant that in each of the above groups analysis shows that the Companies which ceased to exist, and those which decreased their capital, were uniformly those whose capital in 1900 was under the average held by the Companies in each class, whilst those which increased their capital held capital-amounts in all cases larger than the average capital of their particular group.

The average capital of the manufacturing Companies, and also of the retail companies which maintained their position or made progress, was respectively: manufacturing, £2,215,817; wholesale, £253,251; retail, £287,969; indicating that amounts of capital (relatively much smaller) are more effective in the distributive textile trades than is the case in the manufacturing industries.

Having classified the Companies, and discovered the changes taking place within each class, we may now ascertain the movements of the aggregate capital of each group.

We have already seen that of the eighty-four Companies existing in the year 1900 seven had ceased as Companies by 1908.

the matter of time a correlated statement for the whole investigating-
tion is thus obtained.

The results of analysis of the whole eighty-four companies, showing the changes occurring from 1900 to 1908, are as follows:—

The average capital of the 84 companies existing in 1900 was £102,618.

It is important to notice the following categories amongst the companies and whether the capital-amounts are smaller or larger than the average amount.

7 of these 84 companies had ceased to exist by 1908—average capital in the year 1900	£120,744
5 of them had decreased their capital by 1908—average capital in the year 1900	£350,620
52 companies had kept their capital stationary in amount between 1900 and 1908—average capital in the year 1900	£284,995
20 companies had increased their capital by 1908—average capital in the year 1900	£819,560

Arising out of the changes in the aggregate capital of the eighty-four companies existing in the year 1900, the significant features shown by these calculations are:—

1. That the companies which ceased are those with the smallest average capital.

2. That the decrease of capital occurred with the companies which had an average capital smaller than the average of the whole eighty-four companies.

3. That the companies whose capital remained stationary also held amounts less than the average capital of all the companies.

4. That the increase of capital is confined to the larger companies; that is, to those whose average capital was greater than the average of the total eighty-four companies.

5. That the tendency is for the unit of capital to increase.

6. That large masses of capital do not stand against the power of the still larger masses they have to compete against.

In the foregoing paragraphs the movements of the aggregate capital have been shown. But in the following the eighty-four companies are classified into three groups of fifteen manufacturing, twenty-seven wholesale, and forty-three retail; and within these groups the movements of the capital-amounts during the same period, 1900 to 1908, are examined, and the changes are tabulated below.

It will be noted how they corroborate the results of the previous analysis. The gradations of the capital amounts in each classification should be observed.

ECONOMIC CHANGES IN THE TEXTILE AND DRESS INDUSTRIES OF THE UNITED KINGDOM.

It is a too great, even if it is a possible, task to secure the returns, and calculate the total amount of capital administered by *all* the limited liability companies of the United Kingdom engaged in the general Textile and Dress trades; and also to make—*for the purpose of observing the economic changes in such trading, as shown by the variations of capital—a similar calculation of the capital so employed by the same companies at some earlier period.* The statement of Devons that “the principal value of statistics is for the purpose of comparison, and they must often cover the debatable ground between ascertained fact and reasonable conjecture,” must be remembered and practically applied. The method here adopted, therefore—and no other is practicable—has been to use the information given in statements of companies published by one of the most reliable trade papers, *The Draper's Record*, and made available by the special courtesy of the Editor. These lists contain financial statements for the year 1900 of eighty-four of the most important public, limited liability, Textile and Dress companies. The amounts of their paid-up capital vary from £35,000 to £5,498,680, and together comprise the large total capital of £33,819,969. Taking these companies as representative, the task undertaken has been to observe over a period of years the changes—adding increases and deducting decreases—in the capital amounts held in the years 1900 and 1908. While the results of such calculations are not entirely comprehensive, the number of companies considered, and the compass of the large aggregate volume of capital they direct, is sufficiently great to yield an extensive and valuable index to the position, and, by collation, to the tendencies of such trading.

The years 1900 to 1908 synchronise with the most recent statistics yet available for the Textile and Dress Industries of the United Kingdom, and also with those of the co-operative Textile industries, both of which are examined further on. In

It may be objected to this view that many of our manufacturers are prosperous, but on the other hand some of them are not so, and where prosperity is found there is also, generally, found with it something in the nature of monopoly—a monopoly, perhaps, which enables the fortunate possessor to throw upon other British manufacturers, who must buy his product, the enhanced cost at which he works. Or, possibly, prosperity may be due to the possession of capital sufficient to provide labour-saving machinery to an extent that will enable the owner to crush out home competition and so materially increase his own output. Prosperity so gained, however, does not represent pure gain to the community. It may, indeed, involve a loss to the crushed-out competitor and his employees exceeding the profit gained by himself, and in that case the saving power of the community is reduced.

A *prima facie* case, then, seems to exist for holding that the exceptional decline in the value of British home investments which began in 1896, and which has since continued, synchronises with and may be very largely due to exceptional competition, first in the iron trade and afterwards in other manufacturing trades of this country,—a competition which, when aided by increased cost of both manufacture and living, would be capable of materially reducing the saving power of the community. Add to this weakening of saving-power the withdrawal of capital for export, and it may well be that we have reached the full explanation of the depreciation we have been considering. But an attempt to prove this contention in detail would demand an article to itself and must be postponed for the present.

A STOCKBROKER

our mineral resources that the prosperity which we enjoyed during the nineteenth century was due. And it is matter of common knowledge that the iron trade of this country is now carried on under competition of a severe kind. This competition affects us where, as Lord Aberconway has told us, we once "enjoyed a practical monopoly," but where our trade is now carried on under fiscal conditions which it is claimed shut us out of markets once open to us, and there give to our competitors the monopoly we have lost. Subsidies in aid of exports, and bounties on production, have also been offered to our competitors and denied to us. So universal have these protective duties become, and so frequently are our manufacturers handicapped by subsidies and bounties enjoyed by their foreign and colonial rivals, that it is scarcely possible to resist the conclusion that the competition to which the iron trade of this country is exposed is of a quite exceptional character. There is, too, in the publications of the British Iron Trade Association a mass of evidence which goes far to prove that 1896 was the year in which this exceptional competition first began to make itself felt to an extent which would be likely to affect our investment markets, and that the stress still continues. All our manufacturing trades into which iron (or steel) enters are probably affected directly or indirectly in a precisely similar way: while sharing in the general advance of "cost," caused by the enlarged output of gold, their "selling prices" are no doubt kept down by the same exceptional competition. Lord Kinnear, speaking of the mercantile marine engineering industry of the north-east coast, has recently been complaining of "competition unrestricted by anything short of ruin to those engaged in it."—(*Times* *Supplement*, December 4th, 1911.)

"This restriction of trading profits has, moreover, been accompanied by a demand for capital in foreign and colonial countries, which has been largely met in this country and has thus to some extent deprived our home industries of the means (as the Chamberlain of Dornan, Long & Co. tells us) of bringing themselves into such a condition as will enable them to compete with our foreign rivals." "British capital," he says, "is being largely invested abroad: our home industries are not attracting it."—(December 5th, 1911.)

We may then sum up the position of the British manufacturer thus:—Since 1896 he has been exposed to exceptional competition; during the same period his raw materials and wages have been rising in price; and the capital needed to enable him to meet competition has been largely sent abroad.

we may perhaps feel that the movements themselves call for the attention of men in high political and official positions.

Two other developments there are which, though they cannot be said to have brought about the downward turn in 1896, have no doubt had their influence in helping on its continuance.

The readiness of the ordinary British investor to buy foreign and colonial investments had not made itself much felt in 1896, but it cannot be denied that this readiness now exists and that it is increasing. Many who once refused to look at a foreign or colonial share or bond will now buy nothing else, and others are only less completely turning their attention in the same direction. Whatever it is which so entirely reversed the price tendency of British investments in 1896 may well have brought about this change also, and the consequent withdrawal of money from home markets would, of course, help the downward price movement. The reports of the Commissioners of Inland Revenue show how considerable the flow of British capital to foreign and colonial countries has become, and full weight must be given to the fact.

At first sight it would appear that whatever influence the enlarged output of gold would have upon the price of investments would be in an upward direction. The price of commodities is admittedly advanced by a sufficiently increased supply of gold; why should the price of investments be depressed? Yet no doubt an indirect adverse influence may follow from the raising of the cost of wages and raw materials at a time when competition prevents the raising of the price of manufactures. In that way trading profits may be reduced, and ultimately the value of investments may be affected by the consequent falling-off of demand for them. But such an effect could only be confined to this country if industrial competition, to an extent capable of materially affecting trade profits, existed here alone. We should have to prove exceptional industrial competition before we could attribute exceptional depression in the investment markets here to the increased output of gold. Unaided by such exceptional competition, only an opposite effect could be produced.

In such exceptional competition, however, there is reason to think, is to be found the clue to the mystery. If we turn to particular industries, the iron and steel trades seem to offer a field of inquiry that will yield valuable information. For it was mainly to the successes which attended our efforts in developing

had a great deal to do with the fall, because it enlarged the investment powers of trustees. But British railway ordinary stocks are not, and never were, in the trustee class, and yet, as we have seen, they have fully shared in the depreciation. Moreover, the depreciation began four years before the Act was passed. A depreciation affecting not only trustee stocks, but other large classes of investments also, and one which had already been four years in progress, can hardly be attributed to an Act which, after all, only to a very moderate extent enlarged the powers of trustees. It is another case of the wolf and the lamb. Several other alleged causes may be briefly reviewed and—with those already considered—dismissed as incapable of producing the effects exhibited in our diagram.

It is often supposed that the great rise in investment markets which came to an end in 1896 was to a great extent caused by a long period of cheap money; and there undoubtedly is a strong resemblance between the average yield of high-class investments and the average price of money as indicated by average bank rates. The two lines correspond pretty closely; but do they stand to each other in the relationship of cause and effect? Low bank rates no doubt facilitate speculation in securities yielding a low return; but, conversely, high bank rates bring such speculation to a speedy end. The bank rate is constantly moving between wide limits, so that the resultant stock market movements—however considerable—must tend to balance one another and—like the extremes of the bank rate—to be lost in the average of the period. Is it not much more probable that both "average yield" and "average bank rates" are effects, and effects of the same cause or causes? Whatever it was that in 1896 caused investors to accept a yield of £2 11s. per cent. from British railway debenture stocks would also cause bankers to accept a rate of £2 9s. 6d. per cent.

The reduction and occasional suspension of what is called "the old sinking fund" is constantly referred to as answerable for much of the depreciation in Consols, but Consols have merely shared the fate of other British home investments; and it is quite certain that the fall in such stocks as British railway ordinaries can have no possible connection with the variations of the sinking fund.

Yet again, the movements both upward and downward recorded in our diagram exhibit sublime indifference to the varying fortunes of our political parties; so we must decline to regard political changes as accountable for those movements, though

seemed at the time—were but transient and slight in their effects, and the advance then in progress was quickly resumed. In view of such facts as these, which could be multiplied, what is it that can account for the enormous and long continuing change that set in in 1896? The question "When may we look for a turn of the tide?" important and engrossing as it no doubt is, can hardly be approached until we have gained some idea of the cause or causes of so enormous a change.

Several explanations of the fall are commonly offered which, when examined, do not explain it. For instance, the Boer War, which figures so prominently in most attempts, did not begin till the fall had been in progress three years, and it is a remarkable fact that one of the two slight checks in that fall was during that war, the other being during the Russo-Japanese War. We may perhaps, incidentally, learn from these two remarkable breaks in the otherwise continuous downward gradient in the line something that will help us in our investigation. Contemporary history shows that those two wars were the cause of considerable industrial activity in Great Britain. In each case one of the combatants borrowed largely and spent largely in this country. Is it not more than probable that this expenditure meant profitable trade, and that profitable trade and the accompanying check to the fall of investments stand in the relationship of cause and effect? If so, have we not here a suggestion that it is to economic causes we must look for the explanation we are in search of? But when we reflect upon the magnitude of the sums spent in this country during those two wars, and observe how slight and transient was the effect upon the price of investments, we are led to the conclusion that, if the violent disturbance which began in 1896 and has persisted ever since, is of an economic character, it must be due to some cause or causes of great economic importance. It is as if one of our great Atlantic liners were suddenly to find herself in a sea so heavy as to threaten even her stability. To account for such a sea something greater than ordinary storms must have happened.

Another alleged cause is the occurrence of strikes and lock-outs, but they have not been confined to this country, and their occurrence in other countries has not proved capable of such effects there. So, however disturbing they may have been to our industries, we cannot regard them as affording any adequate explanation of what has happened in our investment markets. The Colonial Stock Act, 1900, again, is often said to have

no exception to the rule established by this diagram, for we may fairly regard it as a rule when no fewer than fifty stocks are included in the comparison. Moreover, a glance at any list of investment prices will confirm the general effect of this diagram, and signs are not wanting that land and houses in Great Britain have likewise been passing through a very similar experience, while certainly elsewhere a precisely opposite movement has been going on.

The full problem would thus seem to be—how to explain a depreciation in British home investments taken as a whole (a depreciation which stands out as an exception when compared with the history of other similar investments abroad); and how to obtain any light upon the probable duration of this great adverse movement.

The difficulty of our task is greatly increased by a reference to the Board of Trade returns of our foreign trade, which show that while our home investments have been falling, as we have seen, our foreign commerce has been increasing by "leaps and bounds." Recently published figures prove that in the past eight years our imports have increased in value 25 per cent., our exports 56 per cent., and our re-exports 47 per cent., and that 1911 was a record year. Our foreign trade has been increasing, while our home investments have been depreciating, and the opposite movements have been equally remarkable as regards their strength. The apparent inconsistency does but add to the importance of our inquiry.

We have said that the fall which we are considering came "after a long period of advance in price, broken only by slight checks, and ending in the five years 1892 to 1896 with a rapid and continuous rise," and we now draw attention to the line in the diagram which proves the truth of the statement. It will be seen that one line goes back to 1875 and that it indicates the course of the market in British railway debenture stocks. These stocks constitute a trustworthy standard for our purpose because they have always been, and still are, regarded as beyond the reach of any possible income disturbance. Their price fluctuations, therefore, must be due to those general causes which we are in search of. A glance at the line shows the very remarkable change which occurred in 1896—a very decided and long-continued advance suddenly changed into an equally decided and long-continued decline. The slight set-backs in 1878, 1882-3, 1885, 1890-1 can be accounted for by fears of war, the failure of great banks, and poor harvests; but these events—great as they

TABLE V.—(Line B of Diagram).
*Dividends and Mean Prices. FOREIGN AND COLONIAL RAILWAY
 ORDINARY STOCKS AND SHARES.*

	1911.	1906.	1901.	896.
1. Canadian Pacific...	10-00	6-50	5-00	2-00
2. Chicago, Milwaukee & St. Paul	227-69	184-94	104-50	58-06
3. Illinois Central	123-94	7-00	6-00	4-00
4. New York Cent. & Hudson's Riv.	143-44	179-81	143-81	93-69
5. Pennsylvania	6-00	6-50	6-00	5-00
6. Buenos Ayres Great Southern...	128-87	139-12	154-25	116-12
7. Buenos Ayres Western	121-87	133-69	137-75	130-12
8. Central Argentine	128-87	131-12	104-69	120-62
9. Rio Claro San Paulo	107-44	115-87	65-87	64-25
10. San Paulo (Brazilian)	257-50	262-50	244-68	231-87
	12-00	12-00	10-00	14-00
	209-56	207-19	151-50	193-62
Dividend, per cent.	8-100	7-825	6-875	6-200
Average of the Ten Years' Purchase	155-818	167-786	143-886	117-878
Price Yield	5-4-0	4-13-3	4-15-6	5-5-2
19-2		21-4	20-9	19-0

The dividends are those paid in the year.

have been moving almost as violently in the opposite direction. But the problem is a wider one, as the diagram will show. We there have not only railway ordinary stocks compared, but their debenture stocks or "obligations." And we have a fifth line showing the movement of British municipal stocks during the same period. These five lines show that while the British groups have been falling the foreign and colonial have remained almost stationary in regard to years' purchase of dividends. The inclusion of these other groups emphasises the importance of the problem. It is well known, too, that Government stocks are

producing more than twice as much income as the latter. And the comparison is even more unfavourable than this to the British holdings, for while the foreign and colonial stocks have given him a good many valuable allotments of new issues, which are not taken account of in the above figures, the British railways have done practically nothing of the kind. We here see a very important group of British home investments falling disastrously in price, while a similar group of foreign and colonial investments

TABLE III.—(Line C of Diagram).

Dividends and Mean Prices. BRITISH RAILWAY ORDINARY STOCKS.

[illegible]

The dividends are those paid during the year.

TABLE IV.—(Line D of Diagram).

Dividends and Mean Prices. FOREIGN AND COLONIAL RAILWAY OBLIGATIONS.

	Average of Dividend, 4.45%.	Price	Yield, per cent.	X Years' Purchase	the Ten.
1. Northern of France 3% Obligations	95-0	...	...	...	...
2. Grand Russian (Nicolaï) 4% Bonds	99-0	...	...	...	...
3. Pennsylvania 4½% Gold Bonds	113-0	...	...	...	...
4. Chic. Mil. & St. Paul 4% Gen. Mort. Bds.	95-2	...	...	...	...
5. Buenos Ayres Gr. Southm. 4% Deb. Stock	119-5	...	...	...	...
6. Central Argentine 4% Deb. Stock	110-1	...	...	...	...
7. Mexican Railway 6% Perp. Deb. Stock	181-1	...	...	...	...
8. Nitrate Railways 5% 1st Mort. Bds.	88-6	...	...	...	...
9. Canadian Pacific 4% Con. Deb. Stock	105-2	...	...	...	...
10. Atlantic and St. Lawrence 6% Shares	152-5	...	...	...	...
	119-97	110-92	4-0-3	24-9	24-4
	111-88	111-97	3-18-9	25-4	25-0
	3-19-11	3-19-11	4-2-1	24-4	24-4
	108-43	108-43	4-2-1	24-4	24-4

Dividends and Mean Prices. BRITISH RAILWAY DEBENTURE STOCKS.

TABLE I.—(Line A of Diagram).

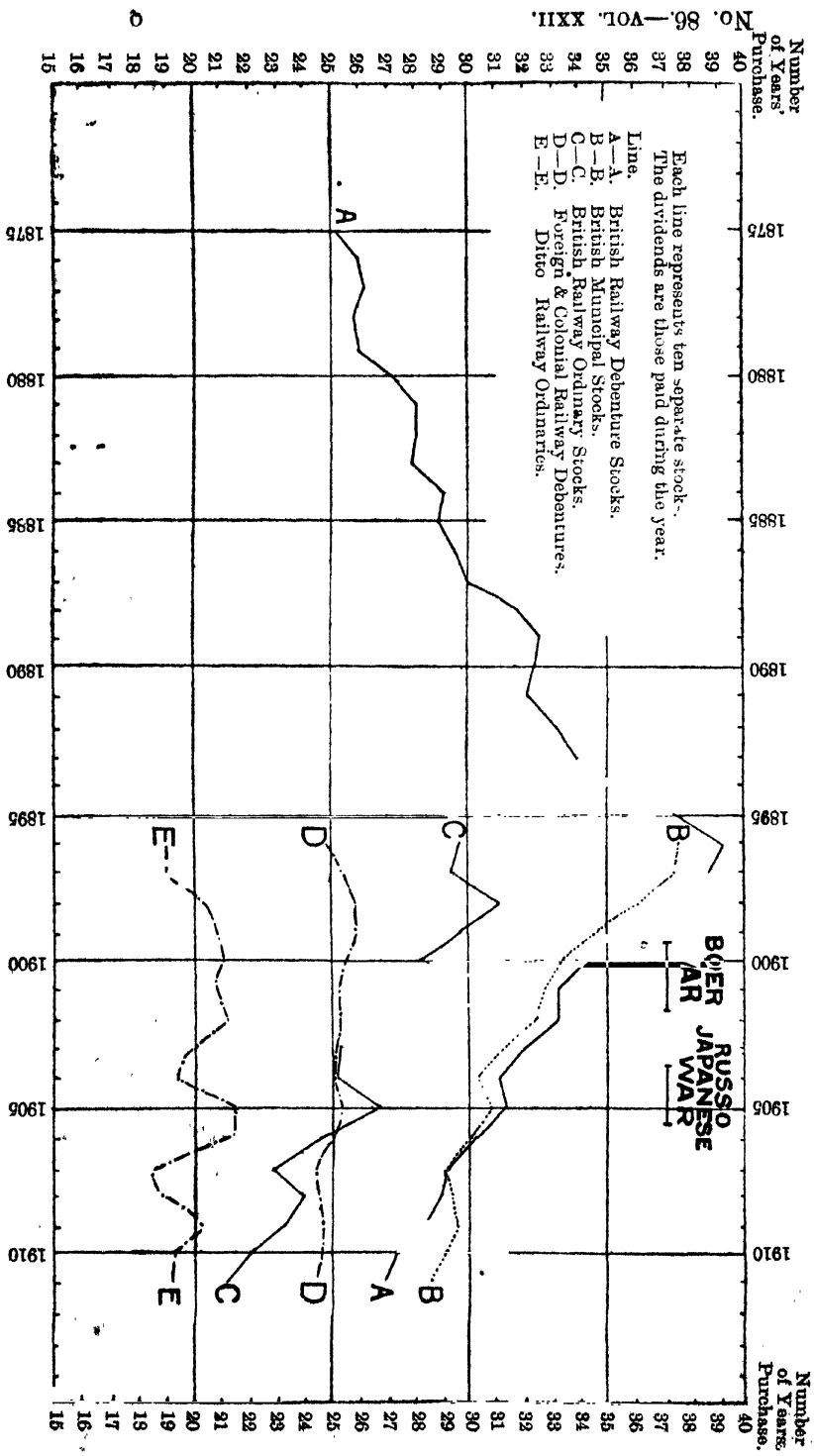
	1876.	1881.	1886.	1891.	1896.	1901.	1906.	1911.
1. Calcuttian	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2. Great Eastern	104.00	107.5	116.2	126.6	156.9	186.2	121.2	108.00
3. Great Northern	102.5	112.2	117.0	127.5	154.2	181.0	119.1	106.2
4. Great Western	105.2	114.7	121.0	181.9	167.7	184.0	128.4	109.6
5. Lancashire and Yorkshire	105.2	114.7	118.0	128.0	119.7	100.5	91.8	81.2
6. London and North Western	105.2	114.7	118.0	128.0	119.7	100.5	91.8	81.2
7. London and South Western	105.7	115.0	120.0	132.7	119.9	108.2	95.8	84.2
8. London, Brighton and South Coast	105.7	115.0	120.0	132.7	119.9	108.2	95.8	84.2
9. (a) Manchester, Sheffield and Lincoln	114.0	124.0	130.5	143.0	173.7	147.4	138.0	120.2
9. (b) London, Tilbury and Southend	118.0	107.6	116.0	123.0	134.1	130.5	117.0	106.1
10. North British	102.7	107.0	114.7	124.6	116.4	100.0	91.0	80.6
Average of the Ten. Dividend, per cent.	4.10	4.05	4.05	3.85	3.55	3.55	3.55	3.55
Yield,	106.82	113.87	119.56	123.50	130.16	118.86	107.73	96.96
Years' Purchase	25.9	28.0	28.5	29.2	30.2	30.3	30.8	29.8

The dividends are those paid during the year.

TABLE II.—(Line B of Diagram).

Dividends and Mean Prices. BRITISH MUNICIPAL SECURITIES.

1. Metropolitan Consolidated (1941) 3% Stock	121.75	101.97	101.97	96.75	89.25	86.44	97.00	102.12	100.50	114.69	97.87	87.87	87.75
2. Birmingham Corporation (1947) 3% "	114.00	100.87	100.87	91.87	84.44	86.44	97.00	102.12	100.50	114.69	97.87	87.87	87.75
3. Bristol Irredeemable 3% Stock	132.75	114.25	114.25	104.60	97.75	86.44	97.00	102.12	100.50	114.69	97.87	87.87	87.75
4. Cardiff (1935) 3% "	122.81	106.75	106.75	101.87	97.00	86.44	97.00	102.12	100.50	114.69	97.87	87.87	87.75
5. Glasgow Irredeemable 3% "	135.25	118.75	118.75	107.37	102.12	89.25	97.00	102.12	100.50	114.69	97.87	87.87	87.75
6. Liverpool 3% "	136.75	117.75	117.75	108.12	100.50	89.25	97.00	102.12	100.50	114.69	97.87	87.87	87.75
7. Manchester 3% "	161.12	123.06	123.06	123.56	118.86	107.73	96.96	102.12	100.50	114.69	97.87	87.87	87.75
8. Newcastle (1936) 3% "	121.37	106.50	106.50	101.25	97.87	87.87	87.87	87.87	87.87	87.87	87.87	87.87	87.87
9. Nottingham Irredeemable 3% Stock	117.12	100.87	100.87	90.44	87.87	87.87	87.87	87.87	87.87	87.87	87.87	87.87	87.87
10. Bradford (1945) 3% "	123.25	109.81	109.81	101.75	97.75	86.44	97.00	102.12	100.50	114.69	97.87	87.87	87.75
Average of the Ten. Dividend, 3.4% Price	127.567	110.798	110.798	102.898	97.074	89.25	97.074	102.898	100.50	114.69	97.87	87.87	87.75
Yield, per cent.	2.13.4	3.1.4	3.1.4	3.6.5	3.10.1	28.5	3.10.1	3.6.5	3.10.1	28.5	3.10.1	28.5	28.5
Years' Purchase	37.5	32.6	32.6	30.1	28.5	28.5	28.5	30.1	32.6	37.5	32.6	32.6	30.1
	1890.	1901.	1901.	1906.	1911.								



THE RISE AND FALL OF THE INDIGO INDUSTRY IN INDIA.

IN the year 1895-96, which was the record year, the export of indigo dye from India was 9,366 tons, valued at £3,566,700. Indigo was then one of the principal articles in the export trade of our Eastern dominions. In 1910-11, the export trade had sunk to about 846 tons, valued at £223,500.¹ Apart from the interest attaching to the rise and fall of this once great industry, the history of indigo cultivation in India possesses a peculiar interest for all Europeans of British nationality who are interested in Indian trade or the problems of Indian administration.

The modern indigo industry was created by the East India Company. It was fostered and developed by the Company's servants, and attained the zenith of its prosperity under the management and care of British capitalists, planters, and traders. Many of the planters attained to great wealth, owned large estates, and settled down to live the lives of country gentlemen in the tropics. They rode to hounds, kept racing studs, revelled in pig-sticking, and entertained their friends on a princely scale. They were splendid riders, and formed the smartest volunteer corps in Upper India. For nearly a century they had almost the monopoly of the production of one of the most valuable and essential dyes known to commerce. Towards the end of the nineteenth century the monopoly was challenged by the invention of a German chemist, who placed synthetic indigo on the world's markets. Since that date the indigo industry of India has rapidly declined, and the export trade has shrunk to such small dimensions that its complete extinction seems likely, if not inevitable. With its extinction the British planters must find new fields for their energies, or develop new industries on its ruins. Some of them have already begun to do so. Others have left the country or drifted into the towns, and the *mofussil*, or country districts, of Bengal and Behar are the poorer owing to the departure of so many sporting planters, who upheld British prestige in places

¹ *Review of the Trade of India, 1910-11.*

remote from the great towns. I propose to trace the rise and fall of the industry in the following pages.

There is clear evidence that the indigo of commerce was cultivated and manufactured in India from ancient times. Dioscorides (A.D. 60) speaks of indigo as "indikón"; Pliny calls it "indicum"; Marco Polo, in the thirteenth century, records the fact that he had seen it at a port of Travancore, and both Conte and Tavernier describe minutely its system of manufacture. But though there are about forty species of the indigo plant to be found wild in India, it is somewhat remarkable that there is no botanical evidence that the indigo plant, from which the dye of commerce is derived (*Indigofera tinctoria*), is indigenous to the country.¹ It was not till the end of the sixteenth century that indigo began to be exported to Europe. Its superiority as a dye to the indigenous products of Europe began to be recognised about this time, and a keen rivalry sprang up between the Portuguese and Dutch merchants for a monopoly of the trade.

The Dutch East India Company, which was formed in 1631, exported indigo to Europe in considerable quantities. The Dutch soon became pre-eminent in the art of indigo dyeing. Their prosperity provoked the hostility of the woad-growers all over Europe, and the latter had sufficient influence to prohibit altogether the importation of the new dye into several countries. The use of indigo was forbidden in France, and Henry IV. issued an edict sentencing to death any person found using it. The prohibitive regulations introduced into England were not so stringent, but the dye was declared to be poisonous, and its use was forbidden. The English Act remained in force till 1660, and it was not till nearly a century later that all the restrictions against importation of indigo into other European countries were removed. Between the years 1664-94, the East India Company exported small quantities—about thirty tons annually—to England. During the eighteenth century this small export was still further diminished owing to the competition of the French and Spanish planters of Guatemala and St. Domingo, and more especially of English planters, who began, in the second half of the eighteenth century, to cultivate the plant extensively in Jamaica, the Barbadoes, Florida, and Carolina.² European skill and capital placed the industry in America on a footing, which almost killed the Indian trade. The American indigo industry was, however, short lived. The planters discovered very soon

¹ *Dictionary of the Economic Products of India* (Wutt), vol. iv., Indigo.

² *Indigo and its Enemies*, by Delta, 1861.

that coffee, sugar, and other products were more profitable in the West Indies, and indigo cultivation was, therefore, gradually abandoned. The separation of America from Great Britain prevented the extension of the industry in Florida and Carolina; internal troubles led to its destruction in St. Domingo, and Guatemala, alone of all countries in the Western hemisphere, continued to send its quota to the European market. During the period of expansion in the Western hemisphere, the Indian industry seems to have been almost entirely forgotten. The cultivation of the plant had, however, never died out, and about the year 1770 some enterprising Frenchmen endeavoured to establish indigo cultivation on a considerable scale in Bengal. Their efforts met with some success, and the East India Company, seeing the prospect of establishing the industry on a more successful basis, took steps to revive it (1779-80). European planters were brought from the West Indies and established in selected districts; the Company's servants were allowed, and, indeed, encouraged to trade in the dye. Though the Company had a monopoly of the trade, the enterprise was not successful from a financial point of view. Heavy losses, in fact, resulted, and the directors made a virtue of a necessity, and declared the trade free to all the world in the year 1789. Their own servants were, however, still encouraged to persevere in the cultivation of the plant, as it was said, "in order to afford them a means of remitting their fortunes home, as well to the benefit of Bengal as to their country."¹

The Indian indigo trade soon after this began to flourish. European capital and skill poured into the country, and indigo became in a few years a staple industry of Bengal. In the year 1793 Bengal exported to England only one-tenth of the total amount imported by her from other countries. By the year 1800, Bengal was sending home more than double as much as all others combined, and this disproportion continued to increase.² From about the year 1815, with the exception of a small quantity which was produced in Mexico, Bengal supplied almost all the indigo required for consumption by the whole world. Though the East India Company had resigned the monopoly of the indigo trade, the directors continued to take considerable interest in its development, at least during the earlier stages. They made pecuniary grants in aid from time to time, encouraged their own servants to take part in the trade, and, most important of all, allowed liberal advances on the indigo crops, which the

¹ *Indigo and its Enemies*, by Delta, 1861.

² *Idem*.

Company were accustomed to purchase from the planters, the Company advancing in this way (during the period 1786-1804) nearly a million pounds. Though the indigo industry flourished greatly during this period, there were in reality few merchants not connected with the Company engaged in the trade. Up to the year 1815 most of the factories were owned by the servants of the Company, and many of these latter realised large fortunes from this source. The most remarkable instance of fortune suddenly achieved in this way was that of Mr. Williams, a member of the Bengal Civil Service, who owned several large factories in Bengal. He built one of the finest vessels of the day, the *Zenobia*, to convey himself, his family, and his fortune, in the form of as many chests of indigo as she could carry, to England.

In order to understand the subsequent developments of indigo, and, indeed, of all Indian trade, it is necessary to describe briefly the trading relations of the East India Company. Previous to the expiry of the Company's charter in 1814, it monopolised the trade of India, save that an opening was allowed to "free merchants," who were permitted to import and export certain goods in the Company's ships. In 1814 the British Government abolished the Company's monopoly; but the free merchants were allowed to trade only in the Presidency towns, Calcutta, Madras, and Bombay. They could not trade in the interior, nor could they lease or hold land from natives of the country without the permit of the Company. In 1833 Parliament deprived the Company of its commercial character altogether, and confined its functions for the future to the territorial and political management of the country. These latter functions were abolished in 1858. Prior to 1834, viz., before the renewal of the charter, private merchants usually took shelter under the shadow of some powerful covenanted servant of the Company, and carried on indigo cultivation and manufacture as his partner or agent. The servant of the Company was also a powerful official, wielding almost despotic powers over the people residing within the limits of his charge. Under this combination indigo culture flourished. The evils to which it led may be readily imagined.

With the abolition of the commercial character of the Company in 1833, a class of indigo planters, altogether independent of the Civil Service, came into existence in Bengal and other parts of Northern India. The system adopted by these planters was to purchase, or take on temporary lease, an estate or portion of an estate from some needy landed proprietor, and start indigo culti-

vation and manufacture on a large scale. At first it appears that the indigo crop was grown mainly in the factor's *khas* lands, that is, in lands which were cultivated directly by his agents or servants. A great deal of land, which had been hitherto reckoned unprofitable, was reclaimed for indigo cultivation by these enterprising European planters. It was soon found, however, that the system of direct cultivation was not very profitable, and an elaborate system grew up under which advances were made by the planter to agricultural tenants (*raiyyats*), on the condition that they cultivated a certain quantity of indigo on their holdings and sold the produce to the factory at fixed rates, the selling price to be adjusted against the advances. The advances were eagerly snapped up by the *raiyyats* at first; but the system led to gross abuses, as it was bound to in a country such as India, where the cultivators will, when they are needy, accept money under almost any conditions, reckless of the day of reckoning. As early as 1837 difficulties had arisen in connection with the relations of Indian landlords and the planters to the *raiyyats*. By a regulation then in force, the indigo planter who had made advances to the *raiyyat* had a lien on the indigo crop grown by the latter. The Indian landlord had the legal right to distrain the crop for arrears of rent, and the rival parties frequently came to blows in the act of exercising their rights. These disputes were the subject of a memorandum by Lord Macaulay, who declared that many *raiyyats* had been "reduced to a state not far removed from partial slavery." Some remedial measures were passed, and further trouble was for a time averted.

In the year 1860 the disputes about cultivation of the plant came to a head. For some years the price of the staple crops had risen greatly, while the indigo planters had continued to pay for the indigo plant, which the *raiyyats* cultivated for them under the system of advances, at rates which had been in vogue for thirty years. The poverty of the cultivators left them at the mercy of the European capitalists, and the system of advances ensured in practice compulsory cultivation of the plants. Complaints to the authorities by the *raiyyats* of enforced cultivation of the crop, and by the planters of the lack of protection against dishonest cultivators, began to be rife. Cases of assault and restraint culminated in serious disturbances in parts of Bengal, and the services of the military were for a time required to protect the planters. A special commission was appointed to inquire into the whole system of indigo cultivation. The finding of the Commissioners was against the planters on the most im-

portant issue. They declared that the cultivation of the crop by the raiyats was unprofitable at the existing rates, though the raiyats were found to have been guilty of some excesses. The indigo planters of Bengal had, it was found, established a sort of monopoly, inasmuch as individual manufacturers could not compete, under a system of free contract, with the existing factories, owing to the fact that the latter got a large portion of the raw produce from the raiyats at considerably less than its full value.¹ The authorities acted vigorously. The raiyats were informed that they must fulfil their legal obligations, but they were also told that there was no obligation on their part to cultivate indigo on behalf of the Europeans when their existing contracts had been discharged. Acts of violence or attempts at compulsion by factory servants were sternly repressed: the number of courts in the disturbed areas was increased, and justice was brought nearer to the homes of the masses of the people.

The indigo disturbances of 1860, and the steps taken by the Bengal Government to repress the disorders, led to a violent controversy. The planters, supported by a section of the Press, imputed bias to the Lieutenant-Governor of Bengal, the Hon. Mr. J. P. Grant (better known later as Sir John Peter Grant), and several other officials. The officials, it was said, were jealous of any independent body of Europeans resident in the country, who might be strong enough to oppose or criticise their despotic acts of power. The covenanted servants of the Company had in former days zealously opposed the settlements of non-covenanted Europeans in India. In 1813, for instance, an elaborate remonstrance was made on behalf of the Company to the British Government against the system of granting licences to go to India, on the ground that "among British residents in India there is a strong disposition to assert what *they conceive to be* their constitutional and indefeasible rights, a general leaning towards each other, and a common jealousy of the authority of Government." The policy of the Bengal Government of 1860 was, it was said, a reversion to this old policy, and the acts of its servants were deliberately intended to discourage the settlement of European "interlopers" in India. Violent attacks were made in the Press on the character of the Civil Service, and in a work entitled *An Appeal of the Indigo Planters to the British Government, Parliament, and People* the covenanted Civil Servant was held up to public scorn as an odious tyrant, who was careless

¹ *Report of the Indigo Commission, 1861.*

even of the rights of his own countrymen whenever they chanced to come into conflict with his own pet views.

"The worn and decrepit invalid," said the writer, "whom we see about London is no more like the Civil Servant of the East in his pride and in his power than is the lion of the forests of Atlas, reposing in his strength or crushing in his spring, like the harmless beast who does duty as the type of his race in an English menagerie. In the early days of the Indian Empire our civilian went out from England a mere boy, and he found himself at once a member of a dominant and privileged class. The millions of Hindustan bowed themselves to the ground before him. After a few years of office, with a salary greater than that of grey-headed barristers in judicial positions at home, he became in some far-away province the pro-consul of the great sovereign Company. He was ignorant of the habits and customs of the people, and he had a bare smattering of their languages, yet his fiat was practically without appeal in all cases, from a contest between two farmers to the confiscation of the possessions of an ancient line of princes. . . . The King's army, and even the King's judges, were an inferior class to themselves; but the few struggling settlers who had found their way from England without being decorated with the Company's covenant were . . . pariahs, the lowest of the low."

The echoes of this violent controversy have long since died away, and it is therefore now possible to review the facts dispassionately and without acrimony. It is true that the covenanted servants of the East India Company for a long time looked on the European residents who were not servants of the Company as interlopers, and a useless weight and embarrassment to the Government. The chief source of this feeling was, of course, the anxiety to preserve the monopolies of the Company intact. The covenanted servants of the Company, as already explained, frequently undertook indigo cultivation and manufacture in association with private traders and planters. During this period the planters found the co-operation and assistance of the civilians a most useful asset, and there were then no complaints made by them of the autocratic methods of the Civil Service. For similar reasons the great body of indigo planters refrained from taking part in the agitation against the Company's rule and against the renewal of the charters in 1814, 1834, and in the final crisis of 1858.

When the indigo troubles of 1860 arose, a new generation of

civilians had come into existence who were entirely dissociated from trade, and whose sole duty was the control and supervision of the administration. The system of indigo cultivation in vogue in Bengal in 1860 was undoubtedly inherited by the planters from the days when civil servants owned factories or traded in the raw product, and it may be conceded at once that it is likely that several of the abuses which were charged against the planters in 1860 flourished in those days. But the altered status of the Civil Service made an enormous difference, and the manner in which the indigo troubles were dealt with was one of the first signal illustrations of the change in the character and conduct of Indian administration. It was evidently futile to expect that the servants of a great trading Company would consider the general interests of the administration of paramount importance as against their own or their masters' trading interests. Once they and their masters were dissociated from trade interests, the road was, however, clear. Their duty was fearlessly to uphold the law of the land, and to see that the scales of justice were fairly held. The masses of the cultivators were evidently being forced to cultivate indigo at unremunerative rates for their European masters, and the authorities were determined to stop this and other abuses. The planters were taken by surprise. They did not realise the change which the abolition of the Company had effected in the character of the administration. They were themselves the heirs of a vicious system, which they could hardly be expected to reform without pressure from without. They gave vent to violent language, and abused the "heaven-born" civilians who had dared to check the abuses of a system which had been started under the aegis of their own official predecessors.

It is somewhat remarkable that one of the first great contests of the reformed Indian bureaucracy should have been on behalf of the most important section of the illiterate and inarticulate masses of India against men of British nationality. The incident was a foretaste of what was to come, for since that date the most important and the most arduous duty of British administrators in India has been to protect these same inarticulate classes against oppression, and to effect the emancipation of the Indian peasant.

The action taken by the Government of Bengal against the planters led to a partial transfer of the industry from the districts of Lower Bengal to Behar, the North-Western Provinces, and Madras. In addition to the fact that the planters of Lower

Bengal were paying the raiyats for the raw produce at very low rates, the season of its cultivation was irksome to them, as it conflicted with the season of their food crops. The raiyats of Madras and of parts of Upper India were, on the other hand, quite willing to grow indigo at low rates, as the indigo season in their districts did not conflict with the seasons for food crops. For these reasons a partial migration of the industry took place, and the next twenty years witnessed a considerable expansion of indigo cultivation in Behar, Upper India, and Madras. Indian capitalists and landowners also began to take a considerable part in the trade, especially in the Madras Presidency.

The total exports from Madras in the year 1855-56 were 1,270 tons. Within the next thirty years they had increased by nearly 70 per cent., while the exports from Bengal (including Behar) declined by 3 per cent. during the same period. The total annual export from India had risen to 6,500 tons in 1887, an increase of 11 per cent. on the figures for 1855-56. It was not, however, till the 'nineties that the trade attained its zenith. In 1895-6 the total exports amounted to 9,366 tons, valued at over three and a half millions sterling. The price of good indigo had also risen from Rs. 200 per factory maund in 1860 to Rs. 300. To all appearances the Indian indigo industry was in a most flourishing condition. India enjoyed an almost complete monopoly of the trade. The Spanish and French planters of the Western hemisphere had practically disappeared. Central America, Java, and the Philippine Isles supplied a small quota to the European markets, but at least nine-tenths of the trade was Indian. The European indigo planters made enormous profits about this period. They lived like Indian princes on their estates, and spent their money freely, little thinking that the days of tribulation were at hand.

As far back at 1880 a German scientist, Professor Bayer, had been engaged in researches with a view to the production of artificial indigo. By a series of ingenious processes an artificial product known as *indigotin* was obtained from coal-tar, which is almost identical with natural indigo dye. The early attempts at manufacture were not, however, successful from a financial point of view, owing to the tedious character of the process and the losses sustained in the preparation. The planters were, therefore, for a while left masters of the situation. The failure of the synthetic product coincided with a boom in the market, and the planters thought no more of the matter; they laughed to scorn the idea that some German crank could produce

indigotin to compete with the natural dye. No efforts were made to improve the system of cultivation or manufacture. The German scientists worked on, and perfected their process. In 1897 the crash came. German synthetic indigo was placed on the market. In the following year there was a serious drop in indigo production in India, and during the last thirteen or fourteen years the history of the Indian dye has been one of steady decrease in production and in price, owing to the increasing competition of the synthetic product. In the year 1910 the total indigo production was only one-tenth of the out-turn for 1897, and the price had dropped to half. Of the eight or nine hundred tons now exported annually, two-thirds come from Lower Bengal and Behar, mainly Behar, and one-sixth from Madras.

The gradual, and, as it would now appear, all but inevitable destruction of one of the most ancient British industries in India affected the planting community to a disastrous extent. Factories have been closed down, and managers and assistants have been sent adrift to find employment in other fields. A remnant of the planters have, however, stuck to indigo cultivation, and inaugurated a campaign of improvement in the methods of cultivation and manufacture, in the hope that they may be able to weather the storm and compete successfully with the synthetic product. The Bengal Government gave a liberal grant in aid of indigo research, and Mr. Rawson and a staff of chemists were brought out from Bradford in 1899 to start investigations in India. Mr. Rawson's researches have led to some improvement in the methods of manufacture, and to the extraction of a higher percentage of dye from the raw product. A further and more important improvement was effected by Mr. Coventry, the Inspector-General of Agriculture, who introduced the Java plant. The latter yields more leaf and much more colour than the Sumatran plant, which was previously planted in Behar. Notwithstanding these efforts, the Behar out-turn for the year 1909-10 was the lowest on record. Research work, however, continues, and the Bengal Government made, in 1909, a grant of £2,000 annually for a period of five years in aid of further investigations and experiments. It is contended that the price of synthetic indigo is very near the cost of production, and that, if an increased percentage of dye can be extracted from the natural indigo plant by means of some simple and inexpensive process, the natural indigo will again recover its place in the markets of the world. The price of the synthetic dye is, however, con-

siderably less than the price of the natural dye, and the sale of the latter is more or less confined to markets where it has a monopoly, though now only a very limited one. In the distribution of indigo exports, the decline in the figures for the United Kingdom is most striking. The only countries which show an increasing demand (1910-11) are the United Kingdom, the United States, and Egypt. The synthetic dye is now firmly established in the markets of Europe, and the German aniline companies are to all appearances in a flourishing condition, the dividends paid by them in 1910 ranging from 10 to 25 per cent. Short of the imposition of a tax on the imports of the synthetic dye into the United Kingdom, it appears that the indigo industry of India can never regain its former importance. The natural dye is, however, undoubtedly superior to the artificial product for the dyeing of woollen and cotton fabrics, and it is possible that a small but limited market, at something like monopoly prices, will therefore always be found for it in the markets of Europe. In addition, there are, of course, the internal Indian trade, and the markets east of Suez, where the synthetic companies have hitherto made small progress.

The decline of the indigo trade is the more to be regretted as, under the modern system of cultivation and manufacture, the abuses which were at one time associated with it have ceased to exist. In Behar, where the industry has been largely concentrated for several years, about three-fourths of the indigo grown is cultivated direct by the factories themselves, and the system of cultivation by raiyats has been stripped of its objectionable features. The Settlement Officer of North Behar declared in 1903 that the indigo industry might, "without any qualification whatever, be pronounced a boon to the proprietors and labourers of the district."¹

ASIATICUS

¹ *Report on the Settlement Operations, Darbhanga District, 1903.*

REVIEWS

The Village Labourer, 1760-1832: A Study in the Government of England before the Reform Bill. By J. L. HAMMOND and BARBARA HAMMOND. (London: Longmans. 1911. Pp. x+418.)

Common Land and Inclosure. By E. C. K. GONNER. (London: Macmillan. 1912. Pp xxx+461.)

THE books are complementary, and so it is well to review them side by side, but they have not the same scope and there is no trace of a common spirit. In one the inclosures of the late eighteenth and early nineteenth centuries form the second act in a brilliantly written social tragedy, full of pity and terror. In the other inclosure all down the centuries "is treated as continuous and as due in the main to the operation of large economic and, so to say, normal causes." The tragedy takes no account of "so to say normal causes," long periods and impersonal forces. Individuals and classes come on the stage with their suffering, folly or sin: then the judgment is set and the books are opened. "We are not concerned," say Mr. and Mrs. Hammond, "to corroborate or to dispute the contention that inclosure made England more productive, or to discuss the merits of inclosure itself as a public policy. Our business is with the changes that the inclosures caused in the social structure of England, from the manner in which they were in practice carried out." The book is an indictment of the English governing class in its relation to inclosure and the rural labourer along lines familiar to economic historians, with a "fuller treatment of the actual method of Parliamentary inclosure" than has before been published, and a new and moving epilogue—based largely on documentary research—dealing with the labourers' rising of 1830.

Having decided to omit the problem of productivity, and in fact omitting many other relevant matters, Mr. and Mrs. Hammond give us a picture that is out of drawing. Inclosure,

left to stand alone, appears both more important and less inevitable than it actually was. Throughout the book one gets the impression that but for greed things could have gone on very well as they were : I am certain that is the view which the unlearned reader would carry away. Perhaps it is true, though I do not think so ; but it should be argued. There is nowhere any suggestion as to how common-field agriculture was to meet the needs of England. "In this tiresome partnership," we are told (p. 36), "the swift were put between the shafts with the slow, and the temptation to think that what was wanted was to get rid of the partnership altogether was almost irresistible." What then *was* wanted? This we are never told. So, too, in the case of common waste. What is said of the sufferings of small yeomen, farmers, cottagers, or squatters from the too reckless inclosure of commons is all true ; the praise given (p. 75) to the statesmanlike proposal of the Board of Agriculture in 1796 that some of the waste should be set aside as allotments for ever, or to a somewhat similar proposal from Lord Suffield in 1830 (p. 321) is thoroughly deserved ; but as we are never told whether or not inclosure of waste was in any case desirable from the national standpoint, though many phrases here and there suggest without argument that it was not, we are left to pass judgment on "the manner in which the inclosures were actually carried out," without knowing whether the Board in 1796 was just proposing palliatives for a great evil or attempting to reserve the rights of the poor in connection with a great step in national economic progress. Our judgment on the Government of England that rejected the Board's advice must be influenced by our answer to this previous question ; and we are given no answer. With that the authors "are not concerned." But in judging a government they ought to be concerned.

Nor are they altogether free from bias against the governing classes. In illustration of aristocratic motive we are given a long, true, and most shabby story of how George Selwyn, "Bully" and "Harry" worked at a Sedgmoor inclosure bill to pay their gambling debts ; and we are reminded that Bully is not "the only aristocrat in difficulties." True, and most admirable art ; but is it quite fair? Contrast Professor Gonner (p. vii) : "I have purposely abstained from dwelling at length on the incidents of a few cases. Such a method, while it may make things more picturesque, is misleading, when the instances are few out of many thousands, and are not necessarily typical." Or again (Hammond, p. 62) : "We can obtain some idea of the kind of man whom the landowners considered to be

competent and satisfactory [inclosure] commissioners from the Standing Orders of 1801, which forbade the employment in this capacity of the bailiff of the lord of the manor." Put "some landowners" for "the landowners" and the statement is formally correct; but as it was a Parliament of landowners that passed the Orders, it would be equally correct to write "the sort of person whom the landowners did not consider," etc. There is no attempt to prove that bailiffs often had been appointed. Professor Gonnor's deliberate opinion (p. 95) is that "taken as a whole, the work of division and apportionment appears to have been discharged conscientiously and fairly"—too kindly an opinion, as I think, but useful as a corrective.

To the authors of *The English Labourer*, as they appear in their book, any advocate of any kind of inclosure is suspect. They can only explain the fact that "Bentham himself" gloated over inclosure by some queer philosophic bias. When Arthur Young awakes to its incidental iniquities, he is quoted with all respect; but when, in his *Survey of Oxfordshire*, written long after his conversion from indiscriminating inclosure-worship, he dares to describe the wretched state of a particular common, we are told in parenthesis that a subsequent historian of Oxford condemned his *Survey* as "a work . . . supported by the farmers and landlords," which had "caught their strain." Abuse the plaintiff's attorney. Another pleader's device is not despised—the sweeping statement followed by facts that do not quite bear it out. Here is an instance:—After inclosure (p. 110) "the labourer" had "to buy the food that formerly he had produced himself" and "in a rising market." Evidence follows, serious enough, that some food prices rose—milk and butter, for instance—owing to the desire of big farmers to concentrate on cereals or take their milk and butter to town. Then a quotation from a contemporary to show that formerly the labourer bought these things from a small farmer. Not a word of "producing himself," though no doubt he often did produce food from his cow on the common, or perhaps now and then from a rig in the open field. The whole paragraph gives the impression that inclosures were the cause, or the main cause, of the price rise in the 'nineties. It is the leading passage in the book—almost the only passage—relating to prices, and it is not good. And there is no suggestion in it or in the footnotes or in the bibliography that any serious study of prices has been so much as attempted.

The title of the book itself might be taken as an instance of a generalisation not quite borne out by what follows. It should

be "the Southern labourer." Once towards the close "the labourer" is called "the South of England labourer" (p. 243). Twice (p. 127, p. 183) the Northern labourer appears in relative comfort as a foil to the misery of the South. There are accounts of inclosure troubles in the West Riding and in Lincolnshire and a few other general references; but the treatment of the North as a whole is inadequate. Perhaps it is well that it should be so, for the agrarian conditions in the three north-western counties and in a good many other districts of the north and west, would not quite fit that account of "the village before inclosure" from which the authors start. They complain somewhere of the "simplifying philosophy of the eighteenth century," while themselves simplifying its economic history.

Mr. and Mrs. Hammond have so strong a case against the governors of England that they could have afforded to be more moderate and more exact. They could have afforded to show more knowledge of "the old English village," its many varieties, and of the great progress made by inclosure before their story begins. The vague statements (p. 31) that "before the eighteenth century" "the Midlands had been the chief scene of these changes" is not enough and is not correct. They might have made it clearer that Kent, where the rising of 1830 started—a rising which the whole scheme of the book encourages one to connect with recent inclosure, as well as with the wage problem after Speenhamland—that Kent had no common fields and very few commons left to be inclosed by Act of Parliament. They might even have spared an odd word of comprehension for the farmer of the inclosure age; but he was "large," but he was "capitalistic," and so he receives no sympathy. It is confidently asserted, without a line of proof or even a reference, that "he" "made larger profits than were necessary to induce him to apply his capital and ability to farming." No doubt some of "him" did; but this provision of a single neck for a whole social class in order to facilitate execution is neither history nor economics. Also it is just the method by which the inclosure fanatic of the eighteenth century proved that "the commoner" was a lazy devil.

With most of what is said of the abuses arising from the promotion of inclosure bills and their conduct through Parliament by the parties mainly interested there can be no quarrel. The evidence of widespread injury to humble folk is sufficient; nor need one word be subtracted from the denunciation of the game laws and other barbarisms of the propertied governors of the early nineteenth century. I am myself rather disposed to agree

with the authors' view that a revived statutory wage, such as Whitbread and others proposed, and the Justices of Speenhamland debated, would have been better than the allowance system; though I cannot accept some of the economic propositions scattered about their discussion of the matter. A damning aspect of the allowance system is brought to light on pp. 184 *sq.*—the fall in the official standard of life during the currency of the system, a fall amounting in some cases to about 33 per cent. in the quantity of bread thought necessary for a family of four. There was provocation enough for that last labourers' revolt for decent wages, which occupies the final chapters of the book. Its tale—the tale which constitutes Mr. and Mrs. Hammond's main contribution to history—is so wretched, so infinitely discreditable to the governors of England, that one can understand how its shadow got thrown back over every preceding page.

Professor Gonner is everything that Mr. and Mrs. Hammond are not, detached, not easy to read, fond of qualifying clauses, formally economic, given to maps and statistics rather than to anecdote, learned in the earlier history of inclosure. His chapter on the seventeenth century is a reprint of an article which, when published a few years ago in the *English Historical Review*, did as much as any single piece of research of the last ten years to upset the old view that the end of the Tudor period marked a definite lull in the movement. Nothing more scientific than this book has ever been written on the whole question. Fresh light is thrown on innumerable points in the story, from the fifteenth century downwards. For the first time careful attention is given throughout to topography and soil as determining factors in the date and character of local inclosure movements. Unless I am much mistaken, no other writer has ever realised the full relevance of geology. No one has previously traced the evolution of the Private Inclosure Act or explained its relation to the inclosure agreements of the seventeenth century. No one has so fully correlated the progress of inclosure with the progress in means of transport and agricultural specialisation. And no one but Professor Gonner has ever tried to test the generalisations as to the effects of the two-fold movement of the eighteenth and early nineteenth centuries—the pasture inclosures and the arable inclosures—by an appeal to figures. There are, of course, many things that figures will not test, and these are just the things for which Mr. and Mrs. Hammond care—the value of a personal independence that was perhaps somewhat squalid, or of social bonds in village life that were in part customary and neighbourly

rather than financial. But where figures can be applied the results are very instructive.

For comparison with *The English Labourer*, one turns to the last quarter of the book, the effect of inclosures on *Conditions of Rural Life*, and *Employment and Population*. Take depopulation. Mr. and Mrs. Hammond in their conclusion blame the world at large for undervaluing *The Deserted Village* as an historical document. Mr. Gonner puts it in a footnote as an instance of "the exaggerated popular view" (p. 397), and goes on to prove that in nineteen and a half English counties there was no possibility of villages being deserted up to 1800, either because there was so little inclosure at all, or because the land inclosed was mainly waste and wild; that in six others the nature of inclosure was not such as to affect population, whatever its other effects may have been, and that from these six we have no complaints; that figures nowhere show any close correspondence between the amount of inclosure and the rate of increase in population round about 1800; that the counties which still had much open field land in 1800 did not show a more rapidly growing rural population than inclosed counties during the next decade—rather the reverse; that parishes inclosed during the eighteenth century are "almost invariably" more densely peopled than the average rural area in their county; that, in conclusion, "so far as the counties, or even large districts or portions of counties, are concerned, there is really no evidence of depopulation," though there was dislocation and, in districts converted to pasture, a slower rate of increase than elsewhere.

Or take poor rates. Professor Gonner (p. 417) finds "no close correspondence between inclosure and the state of poverty" generally, though he thinks that "*considerable* inclosure tended to produce some increase in the amount of relief." But he notes elsewhere (p. 366) that "in many instances the rates in the neighbourhood of large commons prior to inclosure were abnormally high," thus confirming in a measure the old eighteenth-century view that commons harboured ne'er-do-wells, which the Hammonds (pp. 37-40) treat as a nasty gentleman's superstition. Of course, as a justification for the abolition of all commons it was a superstition, but that is no reason for stating the case partially.

Professor Gonner naturally confirms the view that the labourer who had no legal rights of common but enjoyed certain customary privileges, and the small owner, farmer, or cottager with legal rights, often lost by the inclosure movement; but he reminds

us that consolidation of holdings was going on quite apart from inclosure, though obviously an inclosure gave special opportunities. His view that "on the whole the commissioners dealt very fairly with the small holders" (p. 373) is repeated more than once. He sees both the good and the evil of the old order, and he knows that the divorce of common rights from arable holdings, which had been going on since the close of the Middle Ages, did often make commons the resort of rich graziers and miscellaneous bad characters to the detriment of the deserving poor. With some regret he refuses to give "a simple one-sided decision" of "approval or condemnation" as to "the effect of the eighteenth-century inclosures upon the condition of the labouring class," because he honestly can't.

Beginning with a more or less legal account of "common" in all its varieties, full of useful distinctions and modifications of popular verdicts, he next deals with the methods of its extinction, chief of which are approvement, agreement, and the private Act. A separate chapter is given to the working of the private bill system in nearly all its aspects; the omission being that point to which Mr. and Mrs. Hammond pay most attention—the way the bills were put through Parliament. A long and difficult chapter summarises the whole progress of inclosure, difficult firstly because it makes constant and familiar reference to persons, facts and opinions formally introduced only in later chapters or in appendices, and secondly because at times the style is unhappy. Separate chapters on the seventeenth and eighteenth centuries follow. An appendix to this section supplies valuable notes on the whole movement county by county. "Telegraphese" is perhaps permissible in appendix, but one may fairly protest against sentences such as these (p. 247, Warwick):—"In the country north of Avon the woods thinned [in the seventeenth century] owing to ironmaking, Speed, *Geography*, I., 53; 'also Gibson's addition to Camden, II., 328 (*i.e.*, 1694). But according to Gibson this affecting the Fielden in south, since more land in north being free for crops, need arose for cheese, butter, and flesh to counterbalance."

After progress, effects—general effects, effects on agriculture, on the production of particular commodities, on the relative outputs of animal products and grain, on conditions of rural life, on employment and population. Each group of effects is traced historically. The whole method involves a good deal of repetition and one gets a little weary of the reappearance of some of Professor Gonner's favourite witnesses constantly saying the same

thing in different contexts; but the separate treatment of each group of effects is so convenient and so thorough that I would not have it otherwise. Statistical appendices and maps complete this first systematic examination of inclosure in all its bearings. Beside *The English Labourer* it is bloodless as a Board of Trade return, but that is its author's deliberate design. It is, as I have indicated, not a book with a thesis that can be summarised.

J. H. CLAPHAM

The Ricardian Socialists. By ESTHER LOWENTHAL. Columbia University Studies. No. 1 of Vol. xlv. (New York: Longmans, Green and Co. 1911. Pp. 105. Price 3s.)

MISS LOWENTHAL has selected and analysed with eminent skill the writings of the four fascinating authors who have become known to the present generation as the Ricardian Socialists. These men are the Irishman, William Thompson, the disciple of Jeremy Bentham and Robert Owen; John Gray, the old schoolboy of Repton and prosperous man of business, who spent his later life in London and Scotland brooding upon the ills of society and expressing in print his wrath and remedies; Thomas Hodgskin, the Radical journalist, who lectured at the newly established Mechanics' Institute in London and subsequently joined the staff of the *Economist* at the same time that Herbert Spencer was writing for it; and finally, the journeyman printer, John Francis Bray, of whose life practically nothing is known.

Bray wrote in 1839, but the main writings of the other three fall between 1824 and 1834, that strange decade in English history, when social England was painfully digesting the triumphs of the Industrial Revolution and the Napoleonic Wars.

The theme of all these writers was the Right of the Labourer to the Whole Produce of his Labour, and it was a theme of optimism. They saw that England was a country of immense productive capacity, and they believed that this capacity could be made to yield happiness to the working classes if it was accompanied by a more equitable system of distribution. The classical economists, the gloomy and mechanical speculators of the Ricardian school, had, in their opinion, committed the fatal blunder of confining all their attention to production and neglecting distribution altogether. Those who have read, for example, the *Report of the Poor Law Commissioners of 1834*, and the *Evidence given before the Select Committee on Petitions from the Hand-loom Weavers of 1834-5*, must realise the tragic

muddle into which the social economy of England had fallen, and they will understand the indignation felt by the early English Socialists at the pessimisms of the Ricardian economists, with their rigid laws of wages, population and diminishing returns, which were thrown as a kind of wet blanket over the passionate cries of the workers for a better state of things.

The Ricardian Socialists were fairly unanimous on their critical side. They appealed with confidence to the economists themselves for the vindication of their main contention. They could find in the writings of Locke, Adam Smith, and Ricardo plenty of passages which seemed to justify their claim that labour was the source of all value. They fastened on the classical distinctions between productive and unproductive labour, between the natural and artificial systems of society, between fixed and circulating capital, and they elaborated these into an argument to the effect that there was a great pool of surplus value, which by the chicanery of the exchanges the merchants and capitalists seized for themselves but which belonged by right to the labourers who created it. After reading their arguments, we must feel that they anticipated Marx's theory of exploitation and surplus value, without, however, wrapping themselves in Marx's gloomy fatalism or supporting their theory by the argument from history which Marx extracted from his researches into English Blue Books. It should be noted that the contact between Bray and Marx is direct, for the latter, in his *Misère de la Philosophie* (1847), quotes nine pages from Bray's book, *Labour's Wrongs and Labour's Remedies*, though in his greater work, *Das Kapital*, he does not even mention Bray's name. It was fortunate for Marx that Bray was so little remembered.

Though these writers are called the "Ricardian" Socialists, it is not clear that they studied Ricardo himself. As Miss Lowenthal puts it (p. 103), "the term Ricardian Socialism is probably due to the fact that Ricardo was the dominant figure of a school in which the labor theory of value was a common doctrine." It is possible that, if they had read and digested Ricardo, they might have avoided much of the nonsense on currency and credit which mars all their writings.

On their constructive side the Socialists were not in complete agreement. Hodgskin was an out and out individualist; Bray drew near to modern Socialism by advocating the State ownership of the means of production. But the position of both was exceptional. The standpoint of Thompson and Gray was more characteristic of the time. These men were at once the disciples

of Bentham and Owen. The dream, thus jointly inspired, was that of a community of freely associating individuals rid of the oppressions of government and the degradations of the competitive system, working for the joy of work, and playing with painfully monotonous zeal, pursuing agriculture where they could see the whole process from the sowing of the seed to the eating of the grain, and manufacturing with the aid of triumphant machinery the simple and useful products that would suffice for their daily maintenance.

The literature upon the early English Socialists is a growing one. Miss Lowenthal's book is a worthy supplement to Dr. Menger's *Right to the Whole Produce of Labour* and to Professor Foxwell's wonderful introduction to the English edition of it. We are tempted to ask whether it would be possible for any of those who have access to the original material to republish some part of it for the edification and instruction of present-day students. Thompson's *Labour Rewarded*, Gray's *Lecture on Human Happiness*, Hodgskin's *Labour Defended*, Bray's *Labour's Wrongs and Labour's Remedy*, are all short works, and they would form together a fascinating quartette.

C. R. FAY

The Labor Movement in France: A Study in Revolutionary Syndicalism. By LOUIS LEVINE, Ph.D. Columbia University Studies in Political Science. Vol. XLVI., No. 3. (New York: Longmans. London: King. 1912. Pp. 212.)

THIS is apparently a doctoral dissertation; and it is a substantial, systematic, and intelligent piece of work. It is not, perhaps, particularly well proportioned: the greater part of the first chapter, on the labour movement before 1871, might have been omitted without any loss; while, at the other end of the story, there is nothing about the great railway dispute of 1910 and the attempt made to bring about the long-contemplated general strike. On the whole practical and concrete side of the subject, indeed, the book is very weak. Revolutionary syndicalism is, of course, an effort to use syndicates, or trade unions, to bring about social revolution. Dr. Levine is careful to point out that the financial weakness of French trade unions makes them peculiarly susceptible to revolutionary propaganda. But he gives us no real impression of the trade union background; of what the unions are doing when they are not listening to speeches on the general strike or "direct action"; or why some of the big

unions are so ready to follow a revolutionary lead and others so evidently of another mind.

Dr. Levine's book is made up largely of a chronological account of the annual conferences of the "C.G.T.," based, for the earlier years, largely on Seilhae's well-known volume, and for the later on the official *comptes rendus*; and so far as one can judge without going to the original reports, the abstract is fairly adequate and reasonably impartial. Joined to this is a quite interesting review of the writings of the literary exponents or champions of the new faith, especially M. Georges Sorel; though Dr. Levine properly warns us against supposing that the philosophiser of the movement has been in any practical sense a leader of it.

Dr. Levine's dissertation is a statement of ideas and not a criticism of them; and in that respect he sets an example which his reviewer will do well to follow. But I may be allowed one general remark. It is that the vogue just now of "syndicalist" ideas means the return of France for a while to the intellectual leadership—a mistaken and disastrous leadership, perhaps, but still a leadership—of the world's revolutionary forces. When John Mill wrote in 1848, the only "Socialism" worth taking account of was French; and no one can read Comte without smiling at his seemingly fatuous belief in the intellectual mission of his country. Since then, for more than half a century, France has taken a second place in revolutionary minds: the foreground has been occupied by German "thought" and Karl Marx. Whether French logicity, with its unabashed avowal of the doctrine of "the conscious minority" and its rejection of all "parliamentarism," whether political or economic, is likely long to engage the attention of any considerable part of the working classes remains to be seen. Meanwhile, it must be confessed that, to the outside critic, the change from Kautsky to Sorel is rather refreshing, even if he disagrees with each of them almost equally.

W. J. ASHLEY

Rural Economy in the Bombay Deccan. By G. KEATINGE.
(London: Longmans. 1912. Pp. xxii+212. 4s. 6d. net.)

In this excellent little book the author, who holds the post of Director of Agriculture in the Presidency of Bombay, has wisely confined himself to a study of agricultural conditions in the fairly homogeneous tract known as "the Deccan," the high-lying country above the Ghats, with a rainfall which diminishes in amount and becomes more uncertain in distribution the further

east one goes. His account is evidently based upon long and careful study, and his conclusions are fortified, where possible, by statistics, so that he never loses touch with the facts.

It is essential to the prosperity of the cultivator that he should be able to feel himself secure in the possession of his land and of its produce, and should not be exposed to excessive taxation. Mr. Keatinge gives a brief and clear history of land tenure and land revenue in the area with which he deals, and shows how the ordinary Deccan "ryot" or landholder now holds his land direct from Government as a heritable and transferable property, which he can either cultivate himself or lease to others for cultivation, subject to the payment of the land revenue; and how the land revenue and other demands on the land, which under native rule were arbitrary and often crushing, are now definitely fixed, and subject to revision only after every thirty years. The Bombay system of reassessment differs from the systems adopted in most of the other Provinces in India in that it does not make the net produce, or actual rent, or renting-value of the land the principal basis of the land revenue assessment, but proceeds on the assumption that the first complete general assessment made by British officers some sixty years ago furnished a perfect measure of the land revenue the different holdings should pay, as compared with one another; so that, broadly speaking, a reassessment nowadays means little more than an alteration of the general pitch of the land revenue throughout a tract, and effects little change in the distribution of the total burden over the different holdings, even where existing rents show that the original distribution has become unfair to the owners as between themselves. Fortunately, the recent rise of prices and of rents, as stated in rupees, has been so rapid here, as in most other parts of India, that the land revenue demand has been unable to keep pace with it, and according to the author it now absorbs only about four per cent. of the value of the gross produce of the land; so that, although it may not be very equitably distributed, it is undoubtedly moderate in its general incidence. The Bombay Government used to be noted for the rigidity with which it collected the land revenue demand, even in bad years; but it has recently, in common with the rest of India, made its procedure much more elastic, and now adjusts the collections of each year to the outturn of the harvests, so that the cultivator can rarely have much difficulty in satisfying the State's lenient demand from the actual produce of his fields.

One of the main disadvantages from which the cultivator of

unirrigated land suffers is the waste of his time, owing to the want of useful occupation in the fields at certain seasons of the year; and among the benefits conferred by the provision of facilities for irrigation, not the least is that it supplies the cultivator with more constant employment. The conditions of the Deccan do not lend themselves so readily to the construction of great canals as do those of other parts of India, but the Government have spent some £2,000,000 on irrigation works, and other similar works are either in progress or in contemplation which will go far to secure the prosperity of the people and save them from the recurrence of the famines from which the country has from time to time suffered in the past. The people themselves have shown their appreciation of irrigation by constructing 150,000 wells at a cost of £4,000,000.

Mr. Keatinge has made a careful study of the wages of the agricultural labourer, and shows that in the last thirty years they have risen from below 3 annas a day to about $4\frac{1}{2}$, a rise of 50 per cent., which is in itself satisfactory, although $4\frac{1}{2}d.$ per day, the present rate, seems small compared with the 2s. 6d. a day which was recently found to be the average wage of unskilled agricultural labour in England. Prices of food-grains have also risen, but after allowing for this rise he estimates that the real wages of a field labourer have increased by 20 to 50 per cent. during the last century. This improvement in wages is no doubt due largely to the great increase in cultivation, to the growth of commerce and of manufacturing industries, especially in the city of Bombay, and to the serious loss of population during the last fifteen years owing to famine and plague, from which the country is now comparatively free.

The author shows how the improvement in the means of transport by road, railway, and steamship has brought the Deccan cultivator into communication with the world's markets, and enabled him to get a better price for his crops and to purchase the manufactured goods he requires at a much cheaper rate, and gives statistics which prove how rapidly exports and imports have consequently increased and how the cultivation of cotton has been encouraged and has brought great profits to the landowners. He points out how the cultivator suffers from the lack of capital and from the high rate of interest, often 24 per cent. on a mortgage of land, and much higher on loans on personal security, and describes the measures the Government have taken to advance Government funds for the improvement of land at $6\frac{1}{4}$ per cent., to encourage the development of the system of co-operative credit, which promises to prove so beneficial to the Indian peasantry,

and to aid by its guarantee a bank formed with the object of financing agriculturists on reasonable terms. He discusses other means by which the Government can aid the cultivators, and gives an account of the work of research and education now carried on by the well-equipped Department of Agriculture, recently reorganised and strengthened, of which he is the efficient head.

The book is full of accurate information and sound suggestion, and should prove very useful, not only to those who are directly interested in the problems of Indian agriculture, but to all students of economics who desire to contrast the conditions of an Oriental population, dependent almost entirely on the land, with those of the crowded industrial communities of the West.

J. WILSON

The Industrial Punjab. By A. LATIFI. (Bombay and London : Longmans, Green. 1911. Pp. xxvii + 304. Price 4s. 6d.)

IN the Punjab, as in other Indian Provinces, much interest has recently been shown in the possibilities of industrial development, both by private individuals and by the Local Government, which deputed Mr. Latifi, a talented Indian member of the Civil Service, to compile the available information on the subject in a more convenient form than that of the monographs on various industries, which it has been the custom to publish from year to year. The author has brought the facts up to date, after careful local inquiries and consultation with the best authorities, and has produced a readable volume, containing a fairly complete account of the condition of each industry and of the workmen engaged in it. He has also put forward a number of valuable suggestions, based partly on the experience of other countries, European and Oriental, as to the steps that might be taken to improve and develop each branch of industry. Those suggestions will no doubt receive full consideration from the Government, and may be commended for study to all interested in the trade of the Punjab and the welfare of its industrial population.

The general impression given by this compilation is that, notwithstanding the great increase of prosperity secured in recent years by the Province, and especially by the large and important class of peasant proprietors, many of the poorer artisans are fighting an uphill battle against the products of the more highly organised communities of the West. The same cheapening of the means of transport by road, railway, and steamship which

has made it possible for the raw produce of the Punjab fields to compete in European markets with that of other distant countries, has brought the manufactures of Europe into the remotest villages at a price which makes it difficult for the unskilled, unorganised handworker to maintain his position in his own home-market and earn a living wage. His struggle has been made all the harder by the fact that, while the price of the commodities he produces has shown a tendency to fall owing to the cheapness of imported manufactures, the price of food-grains and of the raw materials he must purchase has risen greatly, owing to the demand for export; and there is reason to fear that, in many cases, though his money earnings may not have fallen, or may even have risen slightly, his real wages have decreased or are in danger of decreasing. Large numbers of these artisans have to be content with earnings of sixpence a day or less; few even of those possessed of hereditary skill can make as much as eighteen pence a day; and many of them must find it difficult to maintain their families at the same standard of comfort as they enjoyed not many years ago. At first sight it would appear that the comparative cheapness of labour should enable the local manufacture to hold its own with the imported article, but the want of capital, of education, and of organising ability is more than sufficient to counterbalance this advantage. In most industries the actual worker is deeply in debt to the middleman, and hence finds it difficult to adapt himself to altered circumstances, or even to change his location. There is some prospect that the establishment of co-operative credit societies, which have proved so beneficial to the peasants, may help the artisans also to free themselves from the burden of debt. And there are indications that the merchant and professional classes, who have hitherto devoted their capital and energy mainly to the acquisition of agricultural land or to purely trading and commercial transactions, may find profit in the development of manufactures on modern lines, and so provide employment for the industrial workers in a form which will enable them to compete on more equal terms with imported goods. Few among the artisans can read or write; but the recent increased grants made for primary education will make it possible for those of them who wish, to have their sons better educated; and steps have already been taken by the Government to encourage the foundation of technical schools, where a practical training will be given in several of the more important industries of the Province. Much remains to be done in this direction, and it will be necessary to proceed slowly and cautiously in order

to avoid mistakes. The Government has done much to improve the lot of the agriculturist, who is now enjoying unexampled prosperity; and it is time for both the Government and the leading minds of the Province to devote more attention and effort towards ameliorating the condition of the hereditary artisans, who have not received their full share of the recent great increase in material wealth. Mr. Latifi's compilation will be of much value in aiding them to arrive at a decision as to the best steps to take in order to attain this object.

J. WILSON

The Liverpool Docks Problem. By R. WILLIAMS. (Liverpool : Northern Publishing Co. 1912. 6d.)

MR. WILLIAMS' small book on *The Liverpool Docks Problem* is more important than many lengthier discourses upon social questions, and it derives a special significance from the weight of authority which stands behind its exposition and proposals. Mr. Williams is Divisional Officer for the North-Western Division of the Labour Exchanges, and has had quite exceptional opportunities, which he has used to the full, for studying from inside the whole problem of casual labour. His proposals have stood the searching criticisms of the shipowners and dock labourers of Liverpool, and have received, we understand, the *imprimatur* of organisations representing both parties. If, as is probable, they become the basis of a practical experiment in decasualising dock labour at Liverpool, and if, as there is no reason to doubt, that experiment proves a success, the scheme outlined by Mr. Williams can hardly fail to be tried at other ports where the problem, though smaller in size, is similar in kind. No doubt there are numerous practical difficulties which cannot be foreseen. But Mr. Williams' suggestions certainly seem, on a first examination, to bring us to the edge of treating successfully the particular type of unemployment with which he is concerned.

The picture which Mr. Williams gives of casual labour at the Liverpool Docks is that with which we have already been made familiar by Miss Rathbone and Mr. Charles Booth. But his quantitative analysis of it—and in this matter quantities are all-important—is far the completest which has yet been made. By enlisting the assistance of shipowners, of trade union officials, and a corps of special investigators, he has been able to state approximately the maximum number of men required during the month of January last, an exceptionally busy month in an exceptionally

busy season, and therefore offering an excellent sample for his purpose. The figure obtained, after allowance for overtime, is 19,861. Now the membership of the Dockers' Union is 29,500, and when one has deducted about 2,300 men as representing bargemen, etc., one may say that the total number of men dependent on the Docks for a living is 27,200. Therefore, between the maximum number of men required in a very busy month and the total number of men normally looking for work at the Docks, there is a difference of, at least, 7,000. In other words, about *one-quarter* of the dockers are economically superfluous.

Mr. Williams' next point is that the existence of this immense surplus is the inevitable result of a system under which each firm engages its own men at its own stand independently of every other. This point has been worked out so fully in Mr. Beveridge's book on unemployment, that it need not be elaborated here. But Mr. Williams' illustrations of the way in which casual labour is created give an impressive reality to the theoretical argument. "I know actual cases," he says, "where an employer, who could easily have employed fifty men on weekly wages, peddled the work out among one hundred (giving each man approximately three days a week), simply because he occasionally wanted one hundred men all at once and wanted to make sure of having them. Some foremen actually blacklist a man if he doesn't 'show up' next morning." He calculates (a) that at present, out of about 28,000 men, 70·4 per cent. work between three and four days a week, 12·4 per cent. between three and two days, 5·4 per cent. between one and two days, and 11·9 per cent. less than one day; (b) that if labour were organised in the manner explained by him, out of 15,673 men employed, 56·4 per cent. would work six days a week, 18·2 between five and six days, 6·2 between four and five days, and the remainder various less numbers of days. Clearly, this conclusion is of immense practical importance. Not less important is the proof given by Mr. Williams that the existing system is—on a long view—as disadvantageous to the interests of the employers as to those of the employed.

Mr. Williams' proposals are of so far-reaching a character that one would hesitate as to their practicability unless they had already been endorsed by the chief bodies concerned in the administration of the port. In brief, they aim at doing two things: (i) decasualising labour; (ii) relieving employers of some of the work which they would incur under the Insurance Act, by centralising the payment of wages and deduction of contributions in offices staffed by the Board of Trade. Leaving (ii) on

one side, let me summarise the suggestions as to decasualisation. He proposes that five "clearing houses" shall be established in close proximity to the docks; that on a specified date all persons shall be given a tally; and that after that date no firm shall employ anyone who has not got such a tally to show. The men thus registered will fall into two groups: "company's men" and "clearing house men," the former having a tally which entitles them to preferential employment by particular firms, the latter a tally which entitles them to be called on by the clearing house when employers desire to obtain men through it. A foreman will engage men at the ordinary "stands" existing at present. But before he puts on any "clearing house" men, he will have to exhaust all the "company's" or "preference" men. Each group of firms will be in telephonic communication with the clearing house in its area, and each clearing house will be similarly connected with a central clearing house. Any firm short of men will draw first on its own clearing house, and then, through the central clearing house, on reserves of men who may be unemployed elsewhere.

Such, in bare outline, is that part of Mr. Williams' scheme which relates to decasualisation. What exactly would it effect, if carried out? It would mean in the first place, that the influx of fresh recruits into the industry would be checked until such time as it is thought advisable to issue fresh tallies. The existing surplus, though not suddenly diminished, would gradually correct itself, as the numbers looking for work fell through death and other causes. It would mean, in the second place, that each firm would cease to keep its own reserve, and that men who are unemployed at one "stand" would be drafted to another. The change at first, no doubt, would not be very large, because the existing surplus is so enormous. But this is an advantage. No scheme which proposed suddenly to deprive of work 6,000 or 7,000 would have any chance of acceptance. Again, the adoption of the scheme will involve a certain amount of trouble and forethought by employers. But, on the one hand, the fact that its administration is to be in the hands of a joint committee of employers and workers is likely to ensure that reasonable consideration is given to the practical exigencies of business. And, on the other hand, Mr. Williams has a tempting bait to offer. He proposes to throw on the clearing house the payment of wages and the deduction of contributions under the Insurance Act. This part of the scheme is too complicated to explain in a short review. But the saving to employers which it will involve, if carried out,

will be considerable. Altogether, Mr. Williams' pamphlet contains the most hopeful scheme yet put forward for dealing with the organisation of labour at ports.

R. H. TAWNEY

Problems of Boy Life. Edited by J. H. WHITEHOUSE, M.P.
(London: P. S. King and Son. 1912. Pp. 342. Price 10s. 6d. net.)

A BOOK of this size and at this price on the problems of boy life should either give a full and comprehensive view of the whole question or, dealing with special aspects, it should embody the results of research. There is no explicit statement in the book as to the object in view. Judged from either standpoint, the book is far from satisfactory. In spite of the fact that eleven writers contribute to it, the whole ground has certainly not been covered. The treatment is unsystematic and lacking in proportion. The work of the juvenile labour exchanges and advisory committees receives scant notice. The organisation and problems of the various kinds of lads' clubs might with advantage have been dealt with, as well as the question of trade schools. One problem of boy life which so far has not received the attention it deserves, and which the book practically ignores, is that of juvenile unemployment. The matter is certainly referred to in connection with the proposal to establish schools for unemployed boys, in a passage which indicates that the writers misunderstand the suggestion. Even though attendance at such schools "would be of short duration," it would not be "worthless" by any means. Little fresh knowledge would be acquired, but on the other hand, the demoralisation consequent upon even short spells of juvenile unemployment would probably be averted. The great value of such classes, however, would be that, working on experimental lines, knowledge would be obtained of how to deal with the young out-of-work when the Government discovers the folly of allowing thousands of boys to receive unemployment benefit at the rate of 3s. 6d. a week without requiring some sort of guarantee that the time will not be spent uselessly and aimlessly.

Problems of Boy Life does not add much new knowledge either of facts or methods of treatment. Mr. Tawney's "Economics of Boy Labour" (the bulk of which appeared in the *ECONOMIC JOURNAL*, December, 1909) is, of course, an important contribution, as also is Mr. Norman Chamberlain's study of the station lounge. Many of the chapters contain little or

nothing that is new. The book is not sufficiently constructive except in a vague and general way. This is particularly noticeable in Mr. Whitehouse's chapter on "The Supervision of Juvenile Employment," which in a space of about three and a half pages deals quite inadequately with the Choice of Employment Act. At the present moment nine detailed schemes have been sanctioned by the Board of Education. Fully twenty others are being drafted, or having been arranged are awaiting Government sanction. The day for vague generalisations is therefore past. Both choice of employment committees and juvenile advisory committees have come to grips with the problem; many secondary problems have sprung up before them. Mr. Whitehouse's book might therefore have been of real service by dealing with matters such as these. Further, one of the most important "problems of boy life" is that of the continuation school, which certainly does not receive thorough treatment. What we wish to know about continuation schools is not *why* they should be established, for that is a matter almost of ancient history, but *how* they should be established. Some industrial processes are "held up" in the absence of juvenile workers. The withdrawal of boys and girls from textile factories for attendance at continuation classes will be a matter of great difficulty. How may it be met without increasing the number of these labourers? In glass working the operatives work in "chairs" of four or five, one of whom is a boy. What feasible suggestion can be put forward in order to allow attendance at school without causing a great amount of disorganisation? On such topics as these the book is silent.

The book contains eighteen chapters. The editor writes on "The Reform of Elementary Education," R. H. Tawney on "The Economics of Boy Labour," the Rev. S. J. Gibb on "Boy Labour: Some Studies in Detail"; Mr. Gibb and the Editor on "Boy Labour: Towards Reform." Mr. Clark Kennedy contributes a chapter on "Boy Labour and the Factory System," in which (p. 105) he gives 1838 as the date of the Whig Government's Factory Act of 1833. "The Boy Criminal" is dealt with by Mr. J. M. Myers, following which is Mr. Chamberlain's chapter on "The Station Lounger" mentioned above. Mr. Whitehouse has two chapters on "Street Trading by Children" and "The Supervision of Juvenile Employment." Mr. T. C. Horsfall contributes an interesting (if scarcely relevant) chapter on "Dr. Kerschensteiner's System of Education in Munich." Dr. Marion Phillips reviews the school as a means of social better-

ment, whilst the Rev. W. H. H. Elliott writes two chapters on "Children's Care Committees" and "Homes for Working Boys," the latter of which is much the better of the two. There is an unsigned chapter dealing with "Religious Influences and the Adolescent." Mr. J. L. Paton follows with a consideration of "Cross Fertilisation in Schools." There is a chapter on "The Breaking down of Caste," by Mr. A. H. Hope. The concluding chapters summarise "recent Parliamentary and other inquiries concerned with problems of boy life" and "the compulsory age for school attendance in foreign countries."

The book is interesting enough and will be useful to the general reader, who however will probably consider the price prohibitive. On the other hand, the serious student of social problems is likely to want more for his money.

ARTHUR GREENWOOD

An Experiment in Alien Labor. By E. GEORGE PAYNE, Professor in Harris Teachers' College, St. Louis. (The University of Chicago Press. Pp. 72. 3s. net.)

THIS pamphlet is a translation and an elaboration of a thesis written in German by the author when he was a student at the Universities of Bonn and Berlin. It is a study of the problem of Chinese labour in South Africa; why the experiment was made, the conditions under which it was carried out, and why it failed. The author's main interest in the matter arises out of the Asiatic question in America, but his impartial investigation of the South African episode is of great value and interest in its more immediate bearing upon the bitter controversy of seven years ago and the future labour supply of the gold mines.

At the close of the South African War, the difficulties in the way of getting an adequate supply of unskilled labour were very great. The demand for labour in agriculture and on the railways was considerable, and the supply did not respond at all freely to the demand. The natives had sold their cattle at high prices to the army, and were, not unnaturally, disposed to rest and be thankful. The mineowners urgently demanded a large supply of cheap labour, and suggested methods for obtaining it which ranged from driving the natives to work, either directly by Governmental compulsion or indirectly by the economic pressure of heavy taxation, to the introduction of Chinese coolies. Professor Payne supports the mineowners in their demand for cheap labour. "The employment of whites as unskilled labourers in the

mines," he says, "would have been the ideal solution of the labour problem, and would still be best for Africa, if whites could be used with profit to the mines and farms and without serious social dangers. It is important that South Africa increase the white population as rapidly as possible, but it is more important that it maintain a high standard of living among the whites. . . . Besides, economic conditions make it impossible to use European white labour. The whole South African industry is inseparable from a cheap labour supply in its historical development and present condition. . . . Cheap labour is essential for the mines from the simple fact that only the richest mines could be worked with high-priced labour, and the number of rich mines is very limited."

By reference to official statistics, Professor Payne establishes the accuracy of his conclusion if his premiss, that the mines must be kept open, is accepted. A case, however, might be made out on the other side. The world does not want such a large supply of gold, a supply which clearly tends to raise prices and increase labour troubles in other countries. The Transvaal is not enriched by the full profits of the mining industry, since about 93 per cent. of the capital stock is held in Europe. The mortality among the natives employed in the mines is alarmingly high. Might it not be a wise and far-sighted policy for the South African Government to compel the mineowners to adopt a superior type of labour by strictly limiting the conditions under which natives may be employed?

Rightly or wrongly, the Government took the view that an increased supply of cheap labour was urgently necessary, and they saw in China a source from which an enormous supply of cheap and efficient labour could be obtained. The experience of Natal, however, in the importation of Indian coolies, and of California and Australia with the Chinese themselves, warned the Government that the Asiatic is an extremely dangerous competitor for the white man, if he is allowed to obtain a footing in the country. For this reason, it was decided to introduce the coolies under an indenture and to provide for compulsory repatriation at the end of a term of employment. The mistakes which were made by those responsible for carrying out the policy, the difficulties which arose, and the remedies applied, are ably dealt with in the later chapters of this pamphlet. Those who are interested in the question will find ample evidence upon which to form a judgment as to whether it was or was not a "terminological inexactitude" to describe the Chinese as slaves. Certainly, these normally

peaceable people were employed under conditions which provoked them to crime and violence and which rendered the ordinary administration of justice by the authorities impossible. Professor Payne makes it clear beyond question that the experiment was a disastrous failure, and his chapter upon the "Reasons for the Repatriation of the Chinese" is one of the most interesting in the book. The failure was undoubtedly emphasised by the blunders which had been made. The labourers were placed under the control of persons who did not in the least understand them and who could not speak their language sufficiently well to be properly understood. The employers resented the interference of the Government and refused to co-operate in the administration of justice. The coolies were demoralised by gross mismanagement of every kind. The real cause of failure, however, lay deeper. "For him (the Chinese labourer) there was no possibility of promotion, whatever his abilities might be, and therefore no special inducement to earnest effort. What is still more significant is the fact that no coolie could be immediately discharged. There were two possible places for the coolie in the Transvaal: the mine and the prison. . . . The quick-witted Chinaman soon discovered the predicament of his employer. In this situation the managers thought it inadvisable to report minor offences or cases of insubordination to the superintendents and inspectors. The plan they adopted was to force recalcitrant coolies by means of physical violence to do their work."

Professor Payne does mention that a change of Government took place in England in 1905, but he evidently does not attribute any significance to this fact in relation to the Chinese labourers. The experiment was tried and the failure was complete. "It was generally recognised . . . that 'Chinese labour is inimical to the best interests of South Africa.'"

The whole story is told in this pamphlet with impartiality and thoroughness. It is full of interest both for its own sake and also for the author's more general thesis that the Chinese cannot be assimilated by Europeans, and are therefore a danger and an evil in all countries where European civilisation is dominant.

HAROLD WRIGHT

An Introduction to the Study of Prices, with special reference to the History of the Nineteenth Century. By WALTER T. LAYTON. (London: Macmillan and Co. 1912. Pp. xi+155. 2s. 6d. net.)

MR. LAYTON is to be congratulated alike on his choice of a subject for his lectures, the substance of which is contained in

this little book, and on his successful mode of handling it. The topic treated is of great immediate practical importance, for in no unreal sense or inappreciable measure is it true that the rise in the cost of living, which can be partly traced to the recent alteration in "general prices," lies behind, and justifies, some portion of the prevalent "labour unrest." It is also a matter in which the expert knowledge of a trained theorist alone can enable plain citizens to discern, understand, and gauge the invisible but potent monetary disturbances working underneath the apparent superficial smoothness of the business of ordinary life. It is furthermore, perhaps, the one inquiry *par excellence* in which Statistics can fulfil most aptly the useful rôle of a handmaid to Economics; and in this connection, finally, it will be particularly evident that past history may illuminate, as it may be illuminated by, present hypothesis. To satisfy accordingly what is demanded on this question requires, it is clear, a rare assemblage of high qualities; and yet we have no doubt whatever that the numerous readers of his opportune "Introduction" to this pertinent "Study" will acquit its very competent author of all deficiency. In every respect he is, obviously, well equipped. It is, we understand, the first book he has written, and we anticipate, as we hope, that there may be many successors in the future to this welcome new arrival. His clear statement of the essential factors of the practical problem is no less readily intelligible—and this is a great merit in the expositor of such a subject—than his grasp of the theoretical issues raised is sure and comprehensive, and his acquaintance with the earlier notable episodes of falling or rising prices which during the last century have preceded the existing phase is both full and exact. Nor is he less admirably prepared for the successful execution of his arduous task by his command of the requisite statistical technique. On all grounds, then, he is, as we conceive, fitted for his work; and the result is no mere *succès d'estime*, but, on the contrary, a useful permanent contribution to economic literature.

Much of the statistical material, of the continuing gaps in which he is fully sensible, has been wisely placed in the appendices, which also contain an illustrative chart of the general course of the price movement during the whole period from 1820 to 1910. In the main body of the text, monetary theory, carefully but firmly expressed, is felicitously interwoven with historical narrative. That is divided into sections dealing successively with four periods of those ninety years to which Mr. Layton limits his present study. A period of falling prices from 1820 to 1849 was followed by a period of rising prices from 1849 to 1874;

and then, while prices fell from 1874 to 1896, from 1896 to 1910 they rose again. But the chief novelty in our author's treatment of the first three of these periods, in which he largely follows the inquiries made, and reasoning advanced, by preceding writers, from many of whose conclusions he does not depart, is his detailed distinction between the commodities which kept pace in their price-alterations with the general movement and those which were either in advance of that or lagged behind. This illuminative distinction is also introduced into the fourth and final period, the interpretation of which is now a matter of absorbing interest and of practical concern. For there we are reminded opportunely that until 1911, at any rate, although there was clear evidence that the increase of wages in the less organised employments, like that of railway servants, for example, had not corresponded with the increase of prices, yet this last advance had been hitherto more considerable in the case of some other commodities—and, indeed, of commodities generally—than in that of the articles of food most commonly consumed by the wage-earning classes. Those classes accordingly may have been damnified; but they have not, it would seem, sustained as yet an injury to the extent represented in some quarters; and it may be noticed that coal miners, for instance, in consequence probably of the great relative strength of their trade unions, had secured, it is calculated, an advance of some 21 per cent. in wages, compared with a rise in general prices of some 25 per cent. in the United Kingdom during the corresponding period. The rise of prices in Germany has been apparently some 33 per cent., and in the United States of America it has amounted to as much as 50 per cent. Mr. Layton adduces some instructive reasons for these noteworthy differences; and such comparisons as he has thus made will serve to show the interest and pertinence of his fresh handling of the question.

On one point, however, which has its connection with the comments just put forward, while he is in agreement with Dr. Marshall, he comes into conflict with so high an authority as Jevons—and also, it may be remarked, with the eminent statistician in whose memory were founded the lectures of which this book is the outcome. Mr. Layton holds that the community as a whole benefits more by falling than by rising prices. The contrary conclusion was reached both by Jevons and by Newmarch respecting the results of the great Australian and Californian discoveries of gold in the middle of the nineteenth century; and earlier historians, whose armoury of scientific economic know-

ledge was doubtless markedly deficient in comparison with these later trained and informed investigators, had passed a similar verdict on the balance of advantages and disadvantages attending the much greater disturbance caused by the influx of American silver into Europe in the sixteenth century. Nor were many acute instructed and impartial observers of the episode of falling prices after 1874 disinclined to hold the corresponding view; and Mr. Layton himself states with fairness the grounds on which these opinions rest. But he himself pronounces in the end emphatically for Dr. Marshall's different conclusion. We are quite prepared to admit that there is much to be urged on either side, but we think that the question remains more open to debate than Mr. Layton would apparently allow; and he seems to us, we must confess, to betray symptoms of an anxiety that the scales of even justice should be forcibly inclined in the direction which he favours. It should be noticed that he is compelled to seek for some explanation, agreeable to his theory, of what he acknowledges to have been the depression of labour in the second quarter of the nineteenth century when prices were falling, and of its contrasting prosperity in the third quarter when they were, on the contrary, rising.

The proneness, however, to attribute a result to a single influence is a common failing, and Mr. Layton is right in calling attention in these periods to the possible or probable action of contributory or conflicting causes in producing the observed effects, although he may perhaps exaggerate what he evidently holds to be the injurious restrictions of the Corn Laws in the first of the two periods, and the beneficial stimulus of an altered fiscal policy in the second. He enjoys, moreover, the favouring countenance of Dr. Marshall; and at the particular juncture in the present price-movement, when the surrounding atmosphere is threatening strikes and rumours of strikes, it may seem to require an exercise of courageous faith to believe that the enduring interests of the wage-earner are in the long run bound up with the advantages to be derived by the employer from the cheering stimulus of rising prices. Still he is, at least, manifestly depressed when falling prices curtail or annihilate a dwindling profit. In any event, Mr. Layton is generally impartial in his statement of the various portions of the large subject he handles with such convincing mastery; and the high qualities he possesses and exhibits will, we are sure, recommend his "Introduction" to all who would make at once the easiest and the safest approach available to the fascinating but complicated "study of

prices." That is, perhaps, the most crucial of present popular economic questions, and it must always occupy a prominent place in the scientific discussions of professional economists. On no other topic then could a new recruit "win his spurs" with a more favouring promise of abiding fame.

L. L. PRICE

Monetary Economics. By W. W. CARLILE. (London: Edward Arnold. 1912. Pp. xii+307. 10s. 6d. net.)

It is not easy to give briefly any very coherent account of *Monetary Economics*, partly because of the very wide field which it covers in the course of its 300 pages, partly because it does not belong to the vertebrate order of writings. There are, it is true, two main ideas which the author is concerned to establish, but although these ideas may form the inspiration of his work, they do not constitute in any great measure the basis of the reasoning in the critical portions of it. Primarily, Mr. Carlile is dissatisfied with the present use of economic terms; secondarily, he maintains that economic phenomena can be properly understood only in terms of the money measure in which they are practically expressed. Like Faust, he rejects "In the beginning was the Word," and substitutes for it, "In the beginning was the Thought," but it is in the determination of *whose* thought where disagreement begins. There is a natural bounty upon simple solutions, but however firm may be the belief in a remote simplicity, it seems unreasonable to expect it in the more advanced phenomena of economics. When, therefore, Mr. Carlile lays down the principle not merely that the true meaning of economic terms is to be found from their popular usage, but that apart from that usage a technical expression is an arbitrary creation with no value or reality, he lays himself open to a charge of seeking a simplicity too far from the source. The argument leads him, naturally enough, to the conclusion that in so far as the popular ideas are pecuniary concepts, the science can rightly be presented only by means of these concepts, and money takes its place, not as a disguise which obscures the underlying equilibria of costs and satisfactions, but as the only form in which these phenomena may be presented or even contemplated. It is this view which constitutes, at any rate, the incentive to Mr. Carlile's criticism of orthodox economics, and which leads him to reject as unreal and useless the whole conception of the "margin." But even if it were granted that the marginal theory in its applications is a

repetition of "must be's" which add nothing to knowledge, it must at least be admitted that it is a form of statement which points very clearly to the controlling causes of the phenomena to which it is applied.

The drift of Mr. Carlile's argument may be gathered from such paragraph headings as "The reliance on ambiguity," "Dr. Marshall's enigmatical attitude," and from the sentences: "He tells us that the marginal utility to a man of eight apples may be actually less than that of five of their number. He might just as well tell us that the whole may be less than the part." It is evident that Mr. Carlile is using terms in a sense quite different from that of the writers whom he opposes; his conclusion shows how greatly he has misapprehended their position: "But if in each case the marginal utility of the 'thing' . . . is defined by the utility of the marginal purchase, then the marginal utility of sugar would be just equal to the marginal utility of salt; and, by parity of reasoning, the marginal utility of gold must be just equal to the marginal utility of silver or iron. In fact, the marginal utilities of all exchangeable commodities must be equal *inter se*. If, again, we are to hold, with the theorists, that marginal utility is coincident with exchange value, then it follows that the exchange values of all commodities must also be equal to each other! Here, however, beyond question, we are face to face with a *reductio ad absurdum* of the whole marginal utility theory, if only the *reductio ad absurdum* itself had a definite and recognised place in the discussions of economics."

There is a good deal more critical work in *Monetary Economics*, much of it on minor points of theory. It is often difficult to follow the author in the course of his reasoning; the trail vanishes in some of the more difficult passages, and only reappears near the conclusion; but I take one among many unusual opinions where the argument and conclusion are too explicit to allow of any misunderstanding. Mr. Carlile, in the course of his rejection of the Quantity Theory, maintains that a rise in an index number does not (I think he would say *can* not) indicate a fall in the value of gold; he appears to hold that such a fall can take place only through a widespread mistrust of the metal; but he is quite definite in his conclusion, based, it seems, upon a consideration of the Law of Increasing Return, that "as regards the means of subsistence and as regards reproducible commodities generally, the tendency of an increased gold supply, and a consequently cheapened supply of loan money is to make them more abundant and cheaper in the long run."

For the reasons already given, it is not possible, without danger of misrepresentation, to state briefly Mr. Carlile's conclusions with regard to Wages, Credit, and the other subjects with which he deals; but indeed his practical conclusions do not in general differ widely from those usually held; his concern is mainly with the reasoning by which those results are attained. The critical work which forms the greater part of the book is likely to attract that public which rejects as the work of theorists the most carefully established economic analyses, but no one interested in the science will escape a feeling of regret at the results of criticism founded on misapprehension, and the advertisement of bad arguments which have in reality no supporters.

F. LAVINGTON

Cours Élémentaire de Science des Finances. By GASTON JÈZE.
(Paris: Giard. 1912. Pp. 1133.)

ALTHOUGH the work of Professor Jèze has not hitherto been reviewed in the ECONOMIC JOURNAL, his reputation as a writer on public finance is firmly established. He is editor of the quarterly *Revue de Science et de Législation Financières*; he has published a large and valuable treatise on the general theory of the Budget which is intended to be but the first of a series of twelve volumes covering the whole field of finance; while the comprehensive work before us is the fifth edition of an elementary course which was first issued in collaboration with M. Max Boucard sixteen years ago.

After a brief introduction on the nature and scope of the science of finance, the author devotes the first section, embracing over four hundred closely printed pages, to the subjects of budgetary legislation and financial administration. While particular attention is given to French conditions, there are many valuable comparisons with the methods employed in other countries, and the information is remarkable for its accuracy and lucidity. To English readers, indeed, the space allotted to these questions may appear excessive, and may even deter those who are interested in the more distinctly economic branches of the subject, but the manual is specially adapted to the needs of students in the faculties of law of the Universities of France. The second and third sections, dealing with public expenditure and debts, are relatively brief, while the fourth and longest section is concerned with public revenue and the principles of taxation. Within each of the four sections chapters are reserved for the treatment

of the corresponding topics in relation to local finance. The matter is well arranged throughout, and no question of importance is neglected, though the incidence of taxes receives less attention than it deserves.

It is impossible here to follow in detail the subjects discussed in each division of the work, but the fourth section has interested us most because of the evidence it affords of the change that is taking place in the point of view from which the principles and methods of taxation have been traditionally regarded in France. Until quite recently, French writers on finance have, with few exceptions, adopted a very conservative attitude. Not only has the doctrine of progressive taxation been generally condemned, but still more determined opposition has been manifest towards any form of direct taxation involving "inquisition." The personal taxes of the *ancien régime* had led to such abuses that throughout the nineteenth century the economists viewed any inquiry into the circumstances of the taxpayers as an intolerable instrument of oppression. The Revolution had, once for all, replaced this system by "real" taxes based on such external signs as land, houses and windows, and with slight modifications the method still persists. But during the discussion of the Income Tax Bill of M. Caillaux, which passed through the Chamber of Deputies in 1909 and is now before the Senate, it became evident that the attitude of the economists was changing. While the older authorities such as M. Leroy-Beaulieu and M. Stourm continue to uphold the system of "real" taxes, and hotly condemn progressive taxation as spoliation, a number of the younger writers have gone into the opposite camp. One of the ablest of these is M. Jèze, who is not content merely to denounce the absurdities of the present practice, but declares that its starting-point is radically false. Taxation, he says, ought not to strike goods irrespective of the circumstances of the individual; it should begin with the person and take account of his economic capacity, the efforts he makes to procure his wealth, the sources of his income, and the family charges that he has to meet. Moreover, the capacity to bear taxation grows more than in proportion to the magnitude of a man's income or capital. No mere modification of the existing taxes or multiplication of external signs can meet the demands of modern finance. An income tax is essential if due weight is to be given to personal factors, while it is also needed to furnish that elasticity which is entirely lacking in the present French system. After a good summary of the arguments on both sides, M. Jèze pronounces in favour of progression, not

merely as a counterpoise to the regressive effect of taxes on commodities, but as a principle for taxation as a whole.

His radical departure from the older school does not end here. "Nothing is more legitimate than the intervention of the legislator to prevent individuals from using their property in an anti-social manner," and he insists upon the propriety of employing the weapon of taxation for this purpose. Taxation of unearned increment, too, is approved on the ground that it is wealth acquired without personal exertion on the part of the recipient, and M. Jèze considers that the rate of the tax should be a high one. The complaint that if the State taxes fortuitous gains it ought also to compensate for similar losses, is dismissed as invalid so long as the tax leaves a considerable part of the unearned increment to the proprietor. Nor is the author convinced by the common argument against death duties that they are taxes on capital. In some cases they do not even reduce the capital of the individual, but are paid out of income; and even if it be allowed that they generally constitute a deduction from individual capital, he urges that it by no means follows that they reduce social capital. The revenue may be used in directions that increase national capital, as in constructing roads and buildings or reducing debt; it may be employed to maintain or raise personal capital by being applied to works of social assistance; and it may be said that individual capital is saved from surplus income, so that, if the same burden is placed on incomes, it reduces savings in some measure. Similarly, little value is attached to the objections that progressive taxation in general discourages production, strikes capital or leads to investment abroad. These may be valid arguments against some high taxes, but the evils would result even more surely from high proportional taxation than from moderate progressive taxation, and therefore they are to be considered as objections to a high rate rather than to progression.

While, however, M. Jèze has thus departed from the conservative attitude which was formerly characteristic of French authorities, he is particularly careful in this volume to state fairly the arguments of his opponents, and he ignores none of the difficulties of his own position. In the chapters dealing with the forms of taxation he gives an admirably clear account of the existing French system, and there is also abundant evidence of his familiarity with foreign literature and practice. The errors we have noticed are few and unimportant. He states that under Schedule B of our income tax farmers are charged on half their rental in England and on one-third in Scotland, though this

difference of treatment between the two countries has long been abandoned. He attributes part of the English excise revenue last year to the malt duty, although this tax was abolished in 1880. On the other hand, his statement of the recent changes in our income tax, and of the new taxes imposed by the Finance Act of 1909-10, leaves nothing to be desired in point of accuracy and lucidity.

No reader of M. Jèze's book will be surprised that it has already passed through four editions, and in this revised and augmented form it is sure to receive a general welcome. Besides assisting towards a solution of the practical problems of taxation with which the French people are now confronted, it will be acceptable to English students on account of its excellent brief presentation of the facts of French finance, and it merits an honourable place among systematic treatises for its erudition and breadth of judgment.

STANLEY H. TURNER

Rapports des Changes Avariés et des Règlements Extérieurs.

By RENÉ THÉRY. (Paris : Arthur Rousscau. 1912. Pp. 284. Fr. 8.)

M. RENÉ THÉRY, son of the well-known French economist, M. Edmond Théry, has written, under the above title, a very interesting book concerning the rate of exchange of countries wrestling with deficits and a premium on gold, and experiencing all the drawbacks of a forced currency. The rate of exchange of such countries is, constantly, subject to violent fluctuations. These fluctuations, naturally, weigh heavily upon their trade, for they check the development of business and introduce an element of uncertainty into all transactions. For the foreign merchant is obliged in his dealings with countries having a forced currency to take the continual fluctuations in the rate of exchange into account and to include in his price the risk of the rate of exchange. Hence the increase in price is, eventually, paid by the consumer, whose burden is already sufficiently heavy in the shape of taxes. The rate of exchange on countries with forced currency reflects also the opinion held abroad as to the credit of the State, the conditions of its budget, the economic situation of the country, and its foreign policy. M. Théry also shows the intimate relation existing between the tendency of the rate of exchange and the settlement of international liabilities, and he gives many particulars concerning the monetary crises under which Russia,

Austria-Hungary, Italy, Spain, Portugal, Greece and other countries have suffered, when their balance of trade and balance of payment were unfavourable or their issues of paper money too excessive. He, further, indicates what measures ought to be taken to create a normal state of things, and how intimately the discount policy of the different issue banks is connected with the foreign exchanges.

In a word, M. Théry clearly shows how the foreign exchanges are ruled by various laws of political economy, how the questions of balances of trade, balances of payment and of the fiduciary circulation form an important element for every country, but especially for those countries which do not enjoy the blessings of a sound monetary and banking system, and which have recourse too frequently to excessive issues of paper money.

...He deals further with the monetary reforms of Austria-Hungary, Russia, and of countries which base their monetary system on silver, and gives interesting particulars concerning the monetary policy of the Argentine Republic and the creation of a conversion office in that country (Caja de Conversion) and in Brazil (Caixa de Conversao) to limit the variations of their rate of exchange, by exchanging at a fixed rate their banknotes against gold and gold against banknotes.

C. ROZENRAAD

Depreciation and Wasting Assets. By P. D. LEAKE, F.C.A.
(London: Henry Good and Son. 1912. Pp. xi+183.
Price 10s. 6d. net.)

THE counsel of perfection in practical business affairs is too often turned to no effect either by stodgy self-complacent indifference or by the hackneyed retort of "mere theory." In this book Mr. Leake builds beyond his previous pamphlet-work on this subject, and as a pioneer whose success must necessarily be slow and uncertain, he deserves all the support and commendation we can give to his persistence and thoroughness. It is a significant fact that the particular method of dealing with the depreciation of plant which is associated with his name has been more quickly taken up and appreciated in the United States than by British manufacturers. The author's main thesis is that all the minute care in accounting for the multifarious cash and credit transactions in business which is essential to a proper computation of profit, and which now extends so widely and deeply in the industrial system, is practically set at nought, or at

any rate greatly discounted in its usefulness, by carelessness and haphazard methods associated with provision, out of revenue, for the loss in value of plant and other assets which have depreciated in earning that revenue. It may be accepted without parley that all the trouble that the industrial world may, in course of time, be induced to take in this matter will be amply compensated. Mr. Leake shows the way, and is no uncertain guide. On the accountancy side, given the requisite data, his treatment is complete, and the consideration of rival methods, the "original cost basis," the "written-down value basis," and other forms, with the admirable tables given, is very thorough and leaves little to be desired or proved. But the requisite data are to-day too seldom present. Before they are available on any wide scale the services of the engineer, and a wide and patient series of records of actual facts and conditions over a good period of years, well compared and worked upon, will be necessary. In the writer's view the comparative value of the methods depends upon the conditions of the time; while the majority continue to "scrap" their books after a few years and keep no record of the continual acquisition and relinquishment of plant, the written-down method is, at any rate, safe and relatively accurate—being the *possible* method, it is the *best*. As soon as the detailed record is kept, an automatic "original cost basis" becomes possible, and when this has been kept for two decades Mr. Leake's ideal division of the total output units over the years of life becomes possible for the humblest workshop and most "practical" proprietor. The more persons that can be induced to take the long view and start this record (with its "original cost basis" of allowance in however halting and uncertain a form) the better for sane and sound industry.

The author has modified his former treatment of the subject in several smaller particulars previously criticised in this Journal.¹ The blame attaching to what he regards as an anomalous system of taxation is thrown on to the "almost universal neglect of the commercial community" rather than upon the administration—much upon the principle that the pace of a cycling club must be that of its slowest members. The definition of "inherently" wasting assets has been made precise enough to exclude leaseholds, &c., without question. •

A small point for criticism arises in the treatment of goodwill. It may be, and doubtless generally is, good policy or wise investment to write off goodwill; but it is difficult to see

¹ ECONOMIC JOURNAL, March, 1910.

that it is *obligatory* where all the conditions that have created the goodwill still exist unimpaired, and the sale of the business would yield an equivalent sum under this head. Directly contrary to the commercial tendency to regard a good balance as a favourable opportunity for reducing goodwill, in so far as recent profit is one of the elements in deciding whether the conditions remain unimpaired the obligation to write off varies inversely as that profit.

The work is, of course, not primarily an economic one, although along its whole length it adjoins the economic field. So the author is probably right in dealing only with "normal" profit in the commercial sense, and ignoring any rent-conceptions of profit. The final chapter upon the relation of taxation to the problem appears to be the least satisfactory, as the possibility of the first impact of a tax not being the same as its final incidence is nowhere mentioned or considered. Now it may be perilous to take up this aspect, but it is no less perilous to ignore it. It must be faced. In proportion as the so-called "wasting asset hardship" is a *real* one, and a definite differential burden exists on a certain class of profit, must the possibility of shifting by anticipation in purchase price be a practical consideration. The hardship cannot be real and the question of shifting "mere theory" at one and the same time. It is not clear that the classification of assets so carefully insisted upon for the purpose of this chapter into those "inherently" wasting and others wasting only as personal to the owner, really serves any useful purpose, and does not rather obscure the issue. For although the "corporeal" ground of distinction may be useful for some purposes, it is precisely the *asset in relation to the individual* that we are wholly concerned with in any tax system based on faculty. Whether my coal or my annuity or my goodwill is disappearing is one and the same question in relation to my tax-paying capacity. The vital question is, "Has the vendor of the source of profit been taxed on the profits of the sale?" (whether the source is sold outright or for a number of years). Mr. Leake himself shows that on purchased rights to future income no allowance can be made because the vendor's profits of sale are not taxed. Two persons with similar sources could sell to each other and neither would pay on the sale price, and, if both had an allowance for "wasting," the Revenue would lose tax on these sources altogether. Wherever a source of future profit is sold, if there is a differential tax on that profit (such as this wasting asset disability) it will be in theory thrown back into the purchase price,

and the *vendor* pays. Reasons for supposing that economic friction operates to prevent complete shifting back in some cases (e.g., leaseholds compared with mines or copyrights) have been given elsewhere,¹ and the point is that where there is any reason to believe that friction leads to hardship it would be better to charge the vendor direct and give the purchaser a wasting asset allowance. As soon as you make a direct charge in any of these cases you are in a position to give the allowance from annual profits, but not before. The profit on the sale of a machine (even though a firm makes but one a year) is taxed—then the depreciation can be allowed in theory, as it is in practice. If no depreciation were allowed there would be, in theory, a tendency to depress the price of machinery, though possibly the general necessity for machinery in industry and other economic conditions would operate to modify this result. Although space fails for the successive steps to be shown, the classification leads logically and inevitably to exemption from taxation (*local* and *imperial*) of all natural mineral products (coal, &c.) on so much of the value on realisation as represents pure economic rent, i.e., just that “unearned” portion of the proceeds of which the tax-faculty is usually marked as the highest. Now if this is really meant, it should not be left in implication, for analysis to reveal, but should be made explicit, brought to the forefront, and argued out upon first principles; any classification should then proceed from the result. If that result be a decision that such corpus-value is not a fit subject for taxation, and the wasting asset allowance be given to the purchaser of a mine, he would then have no special burden and would not depress the purchase price, while the vendor (as the original owner) would not be taxed directly on the transaction, so that Mr. Leake’s present proposal would carry out the decision admirably. But such an important question must not be begged under the title of this work. The closing word must be one of unqualified praise for the main purpose and achievement of the book.

J. C. STAMP

Zarabotnaya Plata kak problema raspredelenia (Wages as a Problem of Distribution). By S. I. SOLNTSEV. (St. Petersburg. 1911. Pp. 559.)

MR. SOLNTSEV, who is a lecturer on economics at the St. Petersburg University, has undertaken a very difficult task—

¹ ECONOMIC REVIEW, July, 1911.

that of cutting a clear road through the thick jungle of the Problem of Distribution. His difficulty was the greater, not because this problem was too much ignored, but because, on the contrary, so much has been written on it. First of all, he had to answer the question: What is the Problem of Distribution? Do we mean by distribution the partition of the wealth of the nation, that is, of the whole accumulated produce of labour and capital, or only the annual income? And then, having answered this question, do we mean the actual share of each individual, or the relation between the shares of the various classes of society? It is evident that until these and other points have been cleared up there can be no adequate discussion of the Problem of Distribution. That there is still a great variety of opinions even about the essential nature of the Problem of Distribution, Mr. Solntsev shows by devoting more than half of his book to the analysis and criticism of various theories propounded by a multitude of writers in many countries. It is not that all the theories or most of them are false, but they treat the subject from different standpoints.

Mr. Solntsev, after having perused the vast material supplied by economists of various countries dealing with this theory, or, as he prefers to call it, with the "Problem of Distribution," has divided it into four groups, which, according to their genesis, may be put in chronological order. The first group is connected with the name of Adam Smith. Its distinguishing feature is the development of the idea of pseudo-distribution. This idea through Adam Smith penetrated into post-Smithian economics, and remains there until the present day. The second group made its appearance with the birth of the idea of social distribution of the early English Socialists and partly of Ricardo. This idea has been developed by the later Socialists, and especially by the Marxian school. There has arisen a third group of economists who simply ignored the theory of distribution as a separate one from the theory of production and exchange. The doctrine of income, of the way in which each part of it is created, and the ascertaining of the absolute level of each of them, has become a sub-division of the theory of value. The chief exponents of this school of economists may be taken to be J. B. Clark, Dr. Joseph Schumpeter, and the Austrians, C. Menger and Wieser. The fourth and last group consists of the adepts of the so-called social theory of distribution, which, at its best, is only a reversion to the teaching of Ricardo and the early Socialists. The exponents of this theory, like R. Stolzmann or the Russian professors Tugan-

Baranovsky and Peter Struve, hold that distribution is guided only partly, if at all, by economic laws. According to them, distribution is a purely social phenomenon, which does not depend on the technical or economic side of production.

Mr. Solntsev contests this assertion of the social theorists, and adheres to the Marxian dogma of the economic basis of all social phenomena, and with certain qualifications seems to range himself on the side of the economist of the second group.

However, the difficulty of the theory of distribution lies not so much in the definition of its essence and scope, as in the lack of materials out of which one has to build it up. It is comparatively easy to establish and prove the assertion that the theory of distribution must deal with the ratio between "earned" and "unearned" income, and not with the absolute figures *per capita*. But where are the statistics which would be of sufficient trustworthiness and completeness as to give a sure basis for finding out the laws of distribution? Mr. Solntsev admits this difficulty, but does not think that it blocks the way altogether, and tries to make use of what statistical data there are. He takes some States of America, Prussia and other States of the German Empire, France, and the United Kingdom, especially the latter, where the statistics are more abundant, and in applying the method of the American statistician, Mr. O. Lorenz, and supplementing it by Prof. A. L. Bowley's formula, which takes cognisance of the absolute figures of income, Mr. Solntsev draws curves and compiles tables which reveal to him the law of distribution. This law, according to him, consists in this, that the share of the earned income, that is, the share of the working-classes in the national income, is declining in comparison with the share of unearned income. According to Mr. Solntsev, this *fact* only confirms the proposition to which many economists have arrived theoretically.

In bringing to the notice of English readers Mr. Solntsev's book, we only want to show of what great importance the question of distribution seems now to be in the minds of economists the world over. It is not the theory of prices, of exchange values, or of interest, but the question of the division of national income which chiefly attracts our attention and besieges our mind.

In general, Mr. Solntsev's book is a very exhaustive study of the question, although not quite faultless and not free from rather curious mistakes. Such, for instance, is his polemic with Mr. Sidney Webb on account of a phrase used by the latter in

the essay on "The National Dividend and its Distribution." Mr. Webb mentions "the Distribution of the Means of Production," and Mr. Solntsev objects to it because, according to him, "Means of Production" are not a matter of distribution, they are simply reproduced materials necessary for further production. Machinery, like land, cannot, therefore, enter into the calculations of the division of national income. Mr. Solntsev may be right or wrong on the question what place machinery occupies in the national income, but he is certainly altogether mistaken when he attacks Mr. Webb, because to anyone who has read the above-mentioned essay on National Dividend, it is clear that its author was speaking, not of social, but of the physical and mental distribution of the means of production. Mr. Solntsev also seems to have misunderstood some points in Wilhelm Lexis's and von Thünen's theories. However, in spite of these few faulty interpretations, one must acknowledge Mr. Solntsev's book to be one of the most clear and full expositions of the theory of distribution as yet written in any country.

SEMEN RAPOPORT

The Theory of Distribution and Consumption. By T. LLOYD.
(London: James Nisbet and Co. 1911.)

THIS book contains the substance of a series of articles which originally appeared in the *Statist* newspaper. The author's point of view is briefly explained in the preface, where he expresses the hope that the papers, "with all their imperfections, . . . may be of use to students of economics who are sensible of the shortcomings of the orthodox political economy. That political economy came into being under influences which have long ceased to exist. It is now an obstacle rather than a help; and, consequently, it is not surprising that it has fallen into disrepute." The chief indictment against orthodoxy is that it lays emphasis on production rather than consumption. "Consumption is the primary motive" of economic activity; "production is limited by consumption"; and therefore Mr. Lloyd has attempted to sketch in this book "the great causes which best promote the increase of the purchasing power of peoples." Emphasis is laid on the fact that periodically production appears to outrun purchasing power and to cause a glut on markets, and the Tariff Reform movement is brought forward to prove the existence of over-production at the present moment. "The two processes (consumption and production) are not different aspects of the same economic fact. They are distinct in their nature, the one being subordinate and ancillary to the other."

The theoretical part of the argument is, however, for the most part confined to the preface, and the best commentary on the view put forward is to be found in the matter of the book itself, which is a survey of the economic conditions, progress, and requirements of the United Kingdom, India, and the Empire generally. The needs most emphasised are education "of the right sort"—the worst defect of all grades of our teaching institutions are that they are too literary—opportunity of advancement, properly considered measures for the promotion of health, reform of the land system which would check the desertion of the countryside and put the land to the best use, the conservation of natural resources, better means of communication, banking facilities for the small trader and farmer, and the adoption of means for the prevention and treatment of destitution. The moral is pointed by the examples of the progress of Germany and Japan in contrast with the economic stagnation of Russia, and it is shown that education, a good land system, and the help of the Government in economic matters, are essential means of increasing the consuming power of the people.

But the whole discussion might equally well have emerged from the proposition that consumption is limited by production; for the essential characteristics of the policy Mr. Lloyd desires are (1) that it is calculated to enlarge the productive capacity of the nation generally, and (2) that it increases the importance and efficiency of the part played in the productive process by the masses of the people—workers, small traders, small farmers, &c., and therefore tends to a better distribution of wealth. Every one of Mr. Lloyd's chapters emphasises these two points. Yet he persistently urges the importance of schemes such as the irrigation of the Soudan, not because they improve the productivity of the country, but solely as a means of increasing the consuming power of the people. Nevertheless, the discussion clearly shows that the aim of economic policy must primarily be to increase the productive efficiency of the people. Mr. Lloyd has compiled an admirable realistic study of the productive efficiency of the various peoples of the British Empire.

W. T. LAYTON

Die deutschen Roheisensyndicate in ihrer Entwicklung zu einem allgemeinen deutschen Roheisenverbande. By AUGUST HILLRINGHAUS. (Liepzig: Dunker u. Humblot. 1912. Pp. 115. Price 3 marks.)

In a most careful treatment of this subject, Dr. Hillringhaus has contributed towards the satisfaction of what he rightly con-

siders the present need for a more detailed study of the modern combination movement. General study of the subject has already proceeded far enough; it is now necessary to investigate the different parts of the problem, especially its development in particular industries. This is what Dr. Hillringhaus has done for the pig-iron industry of Germany. In the matter of a sufficient supply of monographs dealing with the position of various industries, Germany is more fortunately situated at present than England. The way is, therefore, more prepared for detailed analysis of the fortunes of combination in different industries.

The author's treatment of the subject is divided into six sections, and concludes with a general review and forecast. In the first section the general economic position of the German pig-iron industry, before and after the combination movement, is outlined. The war of 1870 was followed by rapid expansion in the manufacture of pig-iron. The crisis of 1873 and the decline of the iron trade was checked by the re-imposition of tariffs and the discovery of the "Thomas process." This enabled German firms to withstand the pressure of foreign competition, and brought them together in order to utilise their favourable position to the full.

In the second section Dr. Hillringhaus traces the formation of pig-iron syndicates in Rhenish Westphalia, before and after the erection of furnaces on the North Sea, from the first syndicate formed in 1873; also the relations established between the Westphalian syndicates, the North Sea firms, and large "outsiders" like the Kraft Works. The influence of the latter, and the conflict between "pure" and "mixed" works, occasioned the frequent abandonment of syndicate arrangements.

The "internal" causes of the dissolution of the syndicate are next considered; the diagnosis is clear and precise and amply borne out by experience with other forms of temporary combination. The conflict between "pure" and "mixed" works was specially felt in times of depression; the latter, steel manufacturers in better times, sold their whole production as pig-iron and aggravated the difficulties of the syndicates. Small firms profited at the expense of larger firms, and an ill-advised policy hastened the dissolution of the syndicates generally. Analysing the various syndicates, Dr. Hillringhaus shows that only where these "internal" weaknesses are absent does a syndicate attain even a local importance.

In the very interesting fifth section the consequences follow-

ing the dissolution of the pig-iron syndicates are outlined. As regards Germany, one effect was the beginning of price wars between the various firms, which enabled consumers to secure long credits, and large stocks at very low prices. The conflict between "pure" and "mixed" works was increased and became very disastrous to the latter, especially in the districts where they predominated, *e.g.*, Siegerland. The whole iron and steel industries were injuriously affected, and also the colliery firms, since the demands of the pure works for coke and coal fell off even though premiums were offered on iron exports. As regards foreign countries, Belgium was able to accumulate stocks at low prices, while English exports to Germany, save for special classes of foundry iron, declined. In such connections the book is of considerable interest to foreign readers.

Bringing his inquiries up to date, Dr. Hillringhaus next describes and analyses the most recent syndicates formed in the pig-iron industry in Siegerland, Rhenish Westphalia, Lotharingia, Luxemburg, Upper Silesia, and among the North Sea firms. He estimates how far they overcome the difficulties of effective combination and prepare the way for a general pig-iron syndicate, indicating the points of strength and weakness in such general attempts as the German Blast-Furnace Firms Sales Union.

In a concluding section the whole situation is reviewed and a forecast attempted. The syndicates are tested according to three standards of effective combination, *viz.*, whether they have diminished the force of crises, whether they have maintained prices, and whether they have been able fairly to allot sales among the members. The evidence adduced seems to necessitate a negative answer in each respect. The strength of outsiders, the pressure of depressions and foreign competition, the conflict between localities, between pure and mixed works, &c., make it impossible for any syndicate to exercise effective control on any general scale. Only by watching foreign competition, reconciling differences, conciliating "outsiders," and reducing the importance of the pure works, can syndicate schemes be attended with any measure of success or placed upon a general basis.

In the Appendices the author has added many carefully compiled tables and analyses, which afford ample statistical support for the conclusions indicated earlier.

The character of the subject and the detailed analyses required, naturally tend to make such a volume somewhat technical; but Dr. Hillringhaus has succeeded admirably, especially in Chapters 3 and 7, in making a difficult subject highly interesting and

readable even to the layman. We would await with interest any further comments of the author upon the subsequent development of existing agreements in the pig-iron industry.

G. R. CARTER

Inland Transport and Communication in England. By E. A. PRATT. (London: Kegan Paul, Trench, Trübner & Co. 1912. Pp. 532. Price 6s. net.)

MR. PRATT usually writes for the general reader rather than the student, and this book cannot be described as an exception. At the same time, it is likely to be of considerable service to the student, since no comprehensive history of inland transport in this country has been written. For the student of communications the book is of less value, since some of the chief organisations—the Post Office, telegraph and telephone—are omitted entirely.

The first twelve chapters are devoted to the history of roads and road transport up to the beginning of the railway era. They form on the whole the most interesting part of the book, and yet at the same time are most irritating to read. Quotation succeeds quotation from early writers, and often the few lines by the author connecting the quotations would be better omitted. When, for instance, on p. 43 Mr. Pratt gives a quotation with the date 1629 in which King Charles is mentioned, it is hardly complimentary to his readers for him to add: "The King Charles here spoken of was, of course, Charles I."

The amount of original research in the book is small. The utmost freedom is made of works published in quite recent times, and Mr. Pratt seems to have a preference for saying "ditto" to other writers rather than for formulating his own opinions for himself. It is probably neglect of original sources of information which has led him to give the date of the formation of the Railway Clearing House as 1847 instead of 1842. When Mr. Pratt does take a line of his own, he does not always keep on safe ground. Thus in writing of railway rates and their relation to cost of carriage, coal and iron-stone are quoted as commodities which could not bear rates based on "cost of carriage." These two commodities are largely carried in train-loads, and although the rates are low, it is well known that after being debited with all proper costs and a full share of joint costs, the railways often obtain a profit from their conveyance of over 50 per cent. of the rates. In fact, low grade traffics, even at

very low rates, are very profitable when conveyed in full train-loads. Further on, when Mr. Pratt writes of the difficulties of comparing railway rates in this country and in America, he quite properly points to the differences in length of haul, terminal services, &c., and shows how fallacious would be any conclusions based on a mere comparison of the average cost of transport per ton per mile. On the other hand, when he proceeds to lay down that "the only fair method of comparison" is to "contrast charges for actual consignment of equal weight carried equal distances in the two countries," we cannot assent. Rates are influenced mainly by the normal traffics passing under average conditions. Change the average conditions, or the character or proportions of the main traffics, and the whole rates fabric may require revision. When conditions differ greatly, as also the nature of the chief traffics, no simple comparison is possible. . .

It is impossible to conclude without a word of gratitude to Mr. Pratt. A compact history of inland transport in this country was badly needed, and in spite of its defects this book goes a long way towards supplying the want. Not the least useful part of the book is the list of authorities given on pp. 514-521.

W. TETLEY STEPHENSON

National Insurance. By A. S. COMYNS CARR, W. H. STUART GARNETT, and J. H. TAYLOR. With a preface by the Right Hon. D. Lloyd George, M.P. (Pp. xxx+504. Macmillan and Co. 1912. 6s. net.)

THE authors of this work have set out with the intention of expounding the provisions of the Insurance Act and discussing the interpretation which is likely to be put upon them by the Courts. They have divided their book into two parts: the first consists of six short chapters giving a general outline of the scheme; the second (which fills three-quarters of the volume) contains the text of the measure, with aids to interpretation in the form of notes and of references to leading cases and parallel statutes. Mr. Lloyd George has contributed a tactful little preface.

The opening chapters are not, however, confined to exposition: they not infrequently touch upon questions of policy. This is to be regretted; in a volume of manageable size it is impossible to deal adequately both with the legal aspects of the measure and with its social effects. The result of introducing comment has in the present case been to cramp both parts of the subject.

The authors might with advantage have suppressed some of their observations on economic and political matters and have used the space thus saved in explaining the Act itself rather more fully. Their remarks on the subject of short time, to take one example, are not very enlightening. "It is only just," they tell us "that a part of the burden of contributions [*sc.*, to the unemployment insurance fund] should be remitted to those employers who, by forethought and wisely conceived action, do to some extent mitigate the hardships of unemployment falling upon their workmen." So far they will, meet with general agreement, but they have left platitude behind and entered the realm of controversy when they use this proposition to justify the exceptionally favourable treatment of employers who meet depressions by working short time instead of by dismissing some of their men. Of course, the number of men who are thrown out of work in the industry affected is diminished by the short time system; but, even apart from the indirect effects on other trades, the amount of unemployment—measured by the loss of hours' work (and consequently of wages)—may be greater under that system than it would be if, by dismissals, the master weeded out his less efficient hands or effected other savings; for he could, by the latter means, reduce the cost of producing his goods, lower his prices, and thus prevent the demand from falling off as much as it otherwise would. As long, no doubt, as the workmen do not, when business is brisk, make provision for bad times, the distress of the men who are dismissed often outweighs the gain of those who are kept on. But the whole object of insurance against unemployment is to spread the labourer's income over good and bad times, and its introduction may so improve the lot of those who are thrown out of work that their loss no longer outweighs the gain of those who remain employed. In the trades, therefore, which are brought within the insurance system, short time is even less likely to be socially advantageous after the Act comes into operation than it has been heretofore. The valid argument for giving favourable terms to a master who keeps his men permanently employed is founded, not on social, but on actuarial considerations; his men are less likely to become chargeable on the insurance fund; in basing their defence of this policy on social grounds, the authors have begged a large and complicated question. Other and more obvious blemishes of a similar kind are to be found in their work. Such unsubstantiated expressions of opinion might well have been sacrificed to make room for a more detailed exposition of the

Act : the arrangements as to arrears, for example, should have been treated at greater length ; a few concrete illustrations of the way in which they will work in particular cases would have helped to make them clear ; something might also have been said as to the conditions of transfer from the voluntary to the compulsory class of insured contributors. The information which is given has been presented so clearly that one cannot but wish for more. But the introduction of comment has not only resulted in crowding out useful information, it has also had the effect of giving undue prominence to controversial parts of the measure. The position of the medical profession has been dealt with in a long and wordy chapter, which occupies almost as much space as is devoted to the chapters on "the Employer" and "the Insured Person" put together. It is noticeable that the best chapter in the book (that which treats of the finance of the scheme) is one of the shortest and is the most free from critical reflections : this chapter is, indeed, admirable, being at once lucid, concise, and accurate.

The second part of the book affords less material for criticism, since about one-half of it is taken up with a transcript of the Act. The notes touch upon all the principal difficulties of interpretation, but they cannot, in the nature of the case, definitely solve them. The authors have, as a rule, contented themselves with quoting the decisions on relevant cases which have arisen under other statutes. It may be suggested that a fuller account of the reasoning on which these decisions were founded would have been useful in showing how they bear on the present Act. Indeed, the questions of interpretation might have been treated in a more illuminating and interesting manner, if they had been discussed in a continuous argument instead of being relegated to a disjointed series of remarks which amount to little more than a bare record of decisions and a list of relevant cases. As a work of reference, however, and as a guide to the sources whence further knowledge can be obtained, the volume should prove of value.

G. F. SHOVE

The Legal Position of Trade Unions. By H. H. SCHLOESSER and W. SMITH CLARK. (London : King and Son, 1912.)

ENGLISH law is seen at its worst when it attempts to deal with the situation created by organised labour. It is natural that the instincts of judges should be as opposed to methods used by trade

unions in their attempt to secure a monopoly for trade unionists, as they are sympathetic to capitalistic methods of competition. It is interesting to compare the complacency of the judges who decided in *Mogul Steamship Co. v. Macgregor, Gow & Co.* that one trading body might use the most stringent means to ruin a rival firm, with the indignation of the judges who decided in *Quinn v. Leathem* that trade unionists might not use other, but not more stringent, means to ruin a non-unionist. Political economists cannot determine the economic problems created by the existence of trade unions without a moderately accurate knowledge of the legal position; for such persons Messrs. Schloesser and Clark's book will be most useful. It contains a careful and readable account of the legal position; the numerous quotations from judgments are useful to those readers who have not the Law Reports at hand; and the plan of adding the Forms under the Trade Union Acts, 1871 and 1876, adds to the practical utility of the book.

C. P. SANGER

Die Zukunft der Juden. By WERNER SOMBART. (Leipzig : Duncker und Humblot. 1912. Pp. 91.)

SOMBART's remarkable *Juden und das Wirtschaftsleben* ended with a note of interrogation. He had tried to prove, among other things, that the Jewish type was desert-made and trained by the desert to organisation and forethought in the far-sighted direction of oasis agriculture and of the wandering herds; that it had found the best outlet for the capacities of its blood in "those modern deserts the great cities," and in the nomadic, soil-free, calculating life of capitalism, where it could make its money grow, as once its flocks, by taking thought, not by sweating at the plough-tail or at the forge, those typical labours of the soil-bound Teuton. And he asked, was this type, whose ideal had always been lending to many and borrowing of few, while the sons of the alien were its ploughmen and its vinedressers; was this type—kept pure hitherto by inbreeding and religion—to lose its dominant economic position by neglect of these safeguards among aliens who had learnt, at least in part, its secrets of calculation and the handling of money?

This new pamphlet keeps the riddle in mind, but is not intended as a direct answer to it. Sombart has felt bound to make a contribution to practical "Jew-policy," and his contribution is this. The world contains about eleven and a half million Jews, of whom the greater part by far live in misery. The home of

misery is among the still pure-blooded and orthodox Jews of Poland and Russia and Eastern Europe generally, whose lot in every case—it is argued—has deteriorated during the last generation, owing to the deliberate policy of Christian governments. No prospect of betterment can be detected. Relief through emigration westwards, Sombart fears, will become increasingly difficult. He points to the Welsh anti-Jew riots of last summer (but they are hardly typical, and he should not place them “in der englischen Grafschaft Wales”), also to the growing stringency of American immigration policy. And he thinks that Zionism, the colonisation of Palestine and the adjacent lands, is a real—the most real—hope for these Jews of the East; though, as readers of his book might expect, he has doubts whether many of them will become true peasant cultivators.

Your Western Jew, on the contrary, is not in misery, but is on the average richer, better educated, far more influential in thought and action than his Gentile host. Figures are given in proof, and also a few names: Ricardo, Marx, Disraeli, Gambetta, Luzzatti, Dernburg. Anyone can extend the list. There has been a certain process of assimilation going on in the West to which many look for a solution of the Jew problem. But Sombart thinks otherwise. Firstly, he holds that there has been “social mimicry” on the part of the Jew, but no true racial mixture; and that for two reasons. Jew-Gentile marriages are abnormally unfruitful, and, where successful, they fail to breed out the marked Jewish type. Moreover, although mixed marriages have increased, the social gulf between Jew and Gentile has rather widened than narrowed. (This last opinion I should dispute so far as Britain is concerned.) Secondly, Sombart does not desire assimilation, were it possible, because he values variety of true human species, and hates to think of a world peopled by uniform cross-bred cosmopolitans from the eighteenth-century mould, and because he thinks the species Jew of high worth. He dislikes much of its influence on the Teuton; but his ideal world is a world full of strong, pure, conflicting types. It is his hope that the revival of race-consciousness among the Jews of the West will stop the feeble desire for an impossible assimilation.

He would have the Western Jews remain as a Dispersion: he wants them to act still as yeast in the Teutonic lump. True, he inclines to think that their leading rôle in economic life is to some extent played out; but he asks the Jews to accept this as a blessing and turn their marvellous talents in part elsewhere. He asks them also not to exaggerate these talents and not to

resent certain limits that the kindest Gentile must impose ; not, for instance, to seek entry into the officers' caste, because the Junker's son, with fighting in his bones, really does the work better ; not to resist the tradition which refuses to fill many chairs in one (German) university with Jews, because they ought not to wish sons of their "species" to be taught mainly by members of ours, and ought to understand our inversion of that wish.

The pamphlet, like everything Sombart writes, is full of his strident and attractive personality, learned, courageous, and dressed in great swinging generalisations.

J. H. CLAPHAM

Zur Geschichte der Vermögenssteuern. By Dr. BRUNO MOLL.
(Leipzig : Duncker & Humblot. 1911. Pp. 133. 3.50 mk.)

DR. MOLL proposes to analyse the different forms in which the Middle Ages and modern times attempted to realise what he considers to be the fundamental idea of property-taxes in general : the taxation of the full economic ability of the taxpayer. He intends to cover all the chief "Kulturländer" (what countries he will honour by this designation, we cannot tell). The present volume deals with Germany. The first part with the rural districts in the thirteenth and fourteenth centuries ; the second with the towns up to the beginning of the sixteenth century.

The unit of taxation in the rural districts was usually the "Hufe" (cf. Maitland and Vinogradoff on the English "hide") ; it was not so much a definite measure of land as of value. There were considerable differences in size ; it varied from fifteen to sixty "Morgen" ; and even its usual average of about thirty "Morgen" does not always imply uniformity, as there were local variations in the size of the "Morgen" itself. In the conception of the "Hufe" there were also included the homestead, the garden, and a share in the woodlands, meadows and pastures ; in short, the "Hufe" was the average peasant-holding, not a mere field-measure. Nominally it was the land which was taxed ; the other sources of income were not mentioned ; but in reality it was the full faculty of its holder which was aimed at. In the case of the cottier, who did not own a full peasant holding, the house was frequently the nominal object of taxation ; still, we can hardly suppose that it was his hut as such which was taxed ; again, it was probably only used as marking the average economic status of the practically landless man. The "Hufe" and the house were alternative bases for taxation. Mills, ponds, &c., are often

mentioned as particular objects of taxation; which is only natural, as they do not enter into the usual composition of a farm. Sometimes even movable property was taxed; but again this was usually not a mere tax on the capital value of the property, but a tax on the faculty of its owner. The tax on fishing-nets, the occasional occurrence of which is mentioned by Dr. Moll, is a good example of a tax on income, derived mainly from labour, but got at by means of what appeared on the surface to be a property-tax.

To sum up: Dr. Moll's inquiry into the subject shows that taxation in the German rural districts in the period under consideration, although in appearance based on property, contained elements of an all-round income-tax, and taxed the economic ability of the taxpayers much more nearly than would have been the case if it had been a property tax, as we understand it at the present day.

The system of taxation in towns came to differ from that developed in the rural districts in proportion as the towns were losing their original, prevalently agrarian, character. Forms of wealth, which were practically unknown in rural districts, were assuming in the towns an increasing importance (*e.g.*, urban house-property used for business purposes, stock-in-trade, different forms of money-capital, &c.). Up to the middle of the thirteenth century, taxation was still predominantly based on immovables; movables served occasionally as an alternative basis, *i.e.*, for taxing those who did not own any realty. Taxation of movables as such becomes frequent in the fourteenth century; in the fifteenth century it is almost the rule. In certain towns the tax on realty and personalty developed into a uniform, general property-tax; but not everywhere: for in certain towns complex forms of property-taxes came into being, one group of objects being taxed on its capital value, another perhaps on the income which it yielded, still other groups on the basis of fixed rates. When this income was considered, the property-tax frequently developed into a kind of general income-tax, the tax being assessed not on the presumable income from the object, but on the joint income, given by the object and the labour which used it as means of production. The case was similar when rates were fixed for certain objects, as for instance weaving frames or market stands. Sometimes it was attempted to tax the full income by taxing properties of smaller value at a higher rate, on the supposition that they had to be made up by income from labour; in some cases, again, poll-taxes were used in con-

nection with property-taxes as a complementary tax on earned incomes.

In short, in towns as well as in rural districts what is usually designated as a property-tax tended very often and in many ways to develop into a tax on the full economic ability of the taxpayers.

Dr. Moll's book is the result of a very considerable amount of patient, careful work; he is both cautious and critical; his analysis of the nature of the different taxes is valuable.

Still, his book suffers from some very serious defects. Although the problem of taxation according to faculty forms the centre of his work, he does not seem to have gone sufficiently into the very idea of faculty. Even after having gone ever so deeply into the question, he might, we do not deny, still hold the view which predominates in his book; we hope, however, that he would do it in a clearer but less apodeictic manner.

For purposes of taxation he attaches great importance to the distinction between "stock for consumption" and "capital for production," or, as he frequently calls it, "acquisitive property." He seems to approve of excluding from taxation what he calls "unproductive property." The inclusion of *all* property would "obscure" for him the picture which it gives of faculty (p. 88). Thus also, on p. 111, he mentions: "That as early as the fourteenth century many systems of taxation make a very fine distinction between property for use and for consumption, by making the same objects liable to or free from taxation according to the way they are made use of." That the Middle Ages did not always carry out this distinction to its logical conclusion may be due "to the insufficient clearness of conceptions" (*mangelnde Begriffschärfe*, p. 110).¹

On p. 86 Dr. Moll writes: "The tax on immovables included all houses. That a house which was hired out was 'acquisitive wealth' is clear. But what about the houses inhabited by their owners? Even if at the present day some systems of financial legislation consider the use of one's own house as income, which has to be expressed in its money value, still a house inhabited by its owner remains only 'a property for consumption,' not acquisitive capital." There follows a footnote: "If the idea of acquisitive property is taken in a still wider sense, all difference between acquisitive property and property for consumption comes to an end." In this footnote Dr. Moll gets very near to the

¹ In both these passages Dr. Moll is summing up the opinions of Herr Heidenhain; still the total absence of any protest on his part, as well as numerous passages of his own (*cf.* pp. 44, 48, 85, 88, 110, 111, &c.), entitle us to think that he endorses the views of the latter.

point, but according to our opinion remains on the wrong side. We should like to refer Dr. Moll to Professor Cannan's *Theories of Production and Distribution*. There he will see how futile is the distinction between stock for consumption and capital for production and between money-revenue and income derived in the form of direct enjoyment; and further we should like to refer him to the very interesting discussion on the taxation of such income which appeared in German economic literature *ex re* the Prussian Property-Tax of 1892-3; for a defence of taxing "unproductive property" to the writings of Prof. Wagner, Prof. Jastrow,¹ and also the Memorandum of November 2nd, 1892, with which the Prussian Government accompanied its Bill for the reform of direct taxation.²

Dr. Moll's book suffers also from his manner of dealing with the material and from his rather indifferent literary style. There are too many introductions; each of the two parts is preceded by an "Introduction," and each introduction by "Preliminary Remarks." The narrative itself is continually interrupted by what we might call personal announcements: "We now require to get a clear idea as to . . ." "In this connection be it remarked . . ." "Let us now take in hand the documents, which . . ." "We are now clear as to . . ." "Be it once more recalled, that . . .," &c; we can occasionally forget what the matter is about, we never can forget that it is Dr. Moll who is enlightening us.

He also talks too much of what he is going to say and what he is going to pass over. The remarks at the beginning of the book on the idea of property-taxes in general are interesting; still, the way in which he reproaches economists for not having made these remarks is both pretentious and pompous.

It is a very good thing to put a *résumé* at the end of a lengthy

¹ J. Jastrow, "Die Vermögenssteuer und ihre Einfügung im das preussische Steuersystem." *Jahrbücher für Nationalökonomie und Statistik*, 1892.

² There are two passages in Dr. Moll's book which may perhaps be in contradiction with what we give as his view about the relation of unproductive property to faculty. On p. 86, continuing the discussion of the taxation of houses inhabited by the owners themselves, he asks whether "it was perhaps considered an important basis for economic faculty, and its character in the theory of economics was not thought about?" If Dr. Moll considers that it contributed in any way to the faculty of its owner, then why exempt it from taxation? Or does he mean only a basis for calculating faculty? The other passage occurs on p. 110: he speaks about "die geringere steuerpolitische Leistungsfähigkeit des Gebrauchsvermögen." Then does it in any way contribute to the faculty of its owner? We are not, however, sure about the meaning of this passage, as we are not sure what Dr. Moll wants us to understand by "geringere steuerpolitische Leistungsfähigkeit."

discussion, especially one which has brought out a great variety of facts. Dr. Moll gives us one at the end of the first part of his book; but after having recapitulated the chief points on about half a page, he proceeds to deal again with particular exceptions, a thing hardly fit for a *résumé*. One of these exceptions he gives as follows (p. 50): "An earlier notice . . . is found in d'Elvert (p. 7), who quotes from Riegger's *Materials for the Ancient and Modern Statistics of Bohemia* (Part 3, 1787, p. 542), who again refers to Pelzel's *History of Charles IV.* There it is said . . ." and a footnote follows. "Pelzel, *Emperor Charles IV.*, Vol. II., 1781, p. 887." Why not look up Pelzel, and then quote directly?

L. B. NAYMIER

Die Entstehung der deutschen Kameralwissenschaft im 17. Jahrhundert. By AXEL NIELSEN. Translated from the Danish into German by GUSTAV BARGUM. (Gustav Fischer: Jena. 1911. Pp. 125.)

MR. NIELSEN traces the influence which Roman and Greek writers, especially Aristotle, had on the formation of the German cameralist science; taking cameralism in its earlier and broader meaning, *i.e.*, of a science of the State in general, he gives us a sketch of the development of political science in Germany in the seventeenth century.

The book is of interest for the economist from the point of view of public finance, the fundamental ideas about taxation and the justification of its different forms depending largely on the conception which is formed of the nature of the State. Thus the earlier influence of Roman Law led to the idea of the State as primarily concerned with the distribution of justice; absolute justice became, therefore, the watchword for writers on public finance, and owing largely to the cosmopolitan character of Roman Law, it was even extended to the relation of the State to foreign subjects, and Custom duties on foreign imports were defended as payments for the benefits derived by the importer, not as put on for the sole benefit of the imposing community. In internal taxation the influence of Roman Law pointed primarily towards property as a basis for taxation.

The Aristotelian idea of the State, having its supreme aim in the greatest common good, led the discussion of taxation and public finance in general away from the point of view of pure justice towards that of general utility. Further, the views developed under his influence on the connection between the

State, commerce and money led towards taxation of commercial transactions.

These are but a few isolated points from Mr. Nielsen's book; it is almost impossible to give an adequate recapitulation of his main arguments. His book is overloaded with a crushing mass of names, facts and quotations; in a way it resembles an encyclopædia and sometimes a catalogue. Everybody interested in political science or public finance will find in it things of concern to him. We doubt, however, whether the book as a whole would appeal to many people; its subject is not one of general interest, and the author by his way of treating it has hardly succeeded in popularising it. His erudition is admirable, but wearisome.

L. B. NAYMIEB

L'espansione commerciale inglese nel primo settecento in una relazione di un inviato Sabaudo. By GIUSEPPE PRATO.
(Turin: Officina Poligrafica. 1911. Pp. 29.)

THE MARQUIS ROVERE DI CORTANZE was envoy from Victor Amadeus II. to the English Court in 1725, and sent home the brief report on the commerce of Great Britain which Signor Prato has edited. He describes with great shrewdness England's important trade in the Baltic, the Netherlands, and the Mediterranean, and her dealings with her colonies and the Turks. Ireland was "a vast island full of harbours, so well situated for the advantages of commerce with England and the Indies, that the English, justly alarmed lest such opportunities should hurt their own commerce, have always treated it as a subject province, and have always tried by Acts of Parliament to destroy its manufactures." Such products as the Irish were allowed to export were butter, tallow, leather, salmon, and salt meat, the last of which was sold very cheaply in large quantities for the use of sailors. Mediterranean traders, thought Cortanze, might well buy it also.

Many of his details and conclusions are interesting. England, he writes, is blessed with all the essentials for economic prosperity—natural products, manufactures fostered by legislation, foreign trade; and therefore flourishes exceedingly. He condemns wholly the economic policy of Spain, which discouraged manufactures and permitted the export of its wool, which was returned to the country as cloth, to the great profit of the English merchants who worked it up. Holland, with few industries or natural products, kept her carrying trade in his day despite the

Navigation Acts, by cutting prices. She built cheaper ships, and her sailors lived for much less than would content the British. English cloth-weaving interested him specially. Cheap counterfeits of English goods were already sold abroad. Liège had recently begun to make cloths which, "beautiful in appearance, but very inferior to those of England in substance and durability, yet had a sale in Germany and Flanders, and greatly diminished the sales of English and Dutch cloth in those parts."

The report is full of his admiration for the attitude towards trade of the English Government as distinguished from that of the French. The moderation of the export duties, where these existed at all, encouraged foreign trade, he thought; while protective duties, combined with non-interference at home, promoted manufactures. "All can make cloth freely, . . . without the least duty or gabelle; . . . this fills everyone with courage and emulation to improve the weaving and invent new methods of manufacture." Why, he inquires, should not other countries follow England's example? Italy might thus create a national cloth industry and so redress her adverse balance of trade.

Cortanze's views were in advance of those of many of his contemporaries. How far, asks Signor Prato, were he and other Italian envoys to England responsible for the "moderation" of Italian economic policy in the eighteenth century?

C. VIOLET BUTLER

NOTES AND MEMORANDA

THE MINIMUM WAGE—PAST AND PRESENT.

It is perhaps not altogether a mere coincidence that we find in the year 1795, when the reverberation of the great social upheaval across the Channel was still sounding in men's ears, an attempt made in Parliament to fix by statute a legal minimum wage for agricultural labourers. This was not indeed a new idea, for the Statute of Labourers, passed just after the Black Death, was an attempt at the regulation of wages by law. The Act of Elizabeth provided that the Justices of the Peace should meet annually and assess the wages of labourers in husbandry and sundry other trades. Penalties were imposed on all who gave or took wages in excess of this assessment, which would seem to indicate that the object of legislation at this period was rather to enact a maximum than a minimum wage. The latter principle, however, was embodied in the Act of James I., which imposed a penalty on all who gave a wage below the rate fixed by the magistrate, and the Act of George II., 1747, provided that disputes on the question between master and man should be referred to the magistrate when "no rate or assessment of wages had been made in that year by the Justices of the shire." Samuel Whitbread, the friend and follower of Fox, introduced late in the year 1795 a Bill to empower Justices to hold General Sessions, at which they should "rate and appoint the wages and fix and declare the hours of working of all labourers in husbandry, by the day, week, month or year, and with beer or cyder or without, respect being had to the value of money and the plenty or scarcity of the time." Hammond (*The Village Labourer*) quotes from the *Annals of Agriculture* a most interesting petition from a group of Norfolk labourers—the class mainly concerned—entirely endorsing the principle of the Bill, and (with a remarkable anticipation of a subsequent agitation) actually submitting their own schedule, stipulating that the price of labour should be at all times propor-

tioned to the price of wheat, according to the scale annexed, viz. :—

When wheat is	£14	per last,	the price of labour will be	1/2	per day
"	"	£16	"	"	1/4
"	"	£18	"	"	1/6
"	"	and so on,	with a rise of 1d. for every	£1	of price.

Whitbread's Bill, which also provided that any contract for lower wages than the official assessments was to be void, and that any employer breaking the law should be punishable with fine and imprisonment, was supported on its introduction by Sir Wm. Young, Fox, Dundas, and others. On the second reading, however, on February 12th, 1796, Pitt rose in opposition, and in a speech which traversed the mover's assertion that wages had not kept pace with prices, and alleging that the labourers' hardships were redressed by the benevolence of employers, he threw the whole weight of his authority against legislative interference with the price of labour, or any endeavour "to establish by authority what would be much better accomplished by the unassisted operation of principles." This killed the Bill, and an attempt to reintroduce it in February, 1800, was again opposed by Pitt, and with a like result.

The policy of the minimum wage lingered on for some years through the agency of a philanthropic society which, in 1827, gave evidence before the Select Committee on Emigration, and was finally extinguished by the curt report of the Committee. "It is from an entire ignorance of the universal operation of the principle of supply and demand regulating the rate of wages that all these extravagant propositions are advanced." The problem of agricultural distress, I may remark in passing, remained unsolved. Pitt's alternative measure of Poor Law reform perished still-born; allotments were suggested, but met with little encouragement, it being considered, as in Hampshire, that it would make the men "too saucy," that they would "breed more children and want higher wages"; and finally, the disastrous policy of giving poor relief in aid of wages was adopted—which practically formed the labourers of England into a race of paupers.

Some sixty years were to elapse before we again meet with the minimum wage—demanded in 1888 by the Yorkshire coal miners. The prosperity of trade in the early 'seventies had led to the general recognition of the unions, and trade disputes during that period were settled by the method of collective bargaining—wages being fixed by joint agreements, with resort when necessary to arbitration.

The principle that wages should depend on prices at this time met with general acceptance, and led to the adoption of the sliding scale over the northern coalfields in 1877-8. Hailing it at first as a panacea, the miners soon began, with falling prices for coal, to grumble at its operation; and under Pickard's leadership they now for the first time definitely inverted their demands. In future, they claimed, prices must depend on wages, or, at any rate, they must be fixed at a figure that will include a living or minimum wage, such wage to be a first charge on the industry. The Miners' Federation of Great Britain, formed in 1888-9, definitely adopted this principle, and with the assistance of Conciliation Boards, which came into favour at the termination of the great Midlands strike of 1893, have succeeded in embodying it in all subsequent agreements with regard to piece-work rates. The clumsily worded agreement of 1894, which, however, remained in force for no less than ten years, provided "the rate of wages not to be below 30 per cent. above the rate of wages of 1888, nor more than 60 per cent. above the rate of wages of 1888." In South Wales the sliding scale survived till 1898, when 100,000 men struck against it and remained out for twenty-five weeks. This dispute led to the formation of the South Wales Conciliation Board. In 1910 a disastrous dispute began in the Cambrian collieries over the question of abnormal places. The strike lasted ten months, and from that time the Miners' Federation, influenced by the teaching of French Syndicalists, entered on the movement which has culminated in the recent "national" strike.

This brief survey of the history of the subject will have demonstrated, I think :

(1) That the early instances of statutes controlling wages in this country proved ineffective in operation, and legislation of this nature has been abandoned in practice for more than a century until the present day.

(2) That, on the other hand, the "minimum wage" has been definitely claimed by the Miners' Federation for the last thirty years, and has been admitted by the owners as a leading factor in the adjustment of wages.

There is, of course, one significant exception to the first proposition—but it is of the nature which is held to "prove the rule." It must be recognised that of late years the doctrine that the duty of the State is merely to keep the ring for the competitive struggle has been gradually relinquished by the majority of politicians in favour of a more definite intervention by the State in the sphere

of social and industrial conditions. "Keeping the ring" implies an initial equality of power on the part of the combatants, which is not always present. You may have a powerful yet delicate balance that will weigh anything from half a ton to a postage stamp, but to ensure its accurate working it is enclosed in a glass case to shield it from draught or dust. The law of supply and demand is such a balance, and in the absence of fair conditions the descending scale is apt rather to come down like a sledge-hammer on the heads of the weaker party. This was recognised by the present Government to be the case in respect to what are known as the sweated industries, and with the assent of both sides the Trade Boards Act was passed in 1909, which empowered Trade Boards to fix the minimum rate to be paid to employees, either for time-work or piece-work, in certain trades, such as chainmaking, tailoring, cardboard box and machine-lace making, the result being that the lowest wages paid in these trades have been raised from 50 to 80 per cent.

It was felt that the employees in question were a defenceless and unorganised body, working under "abnormal conditions"—a phrase that supplies alike the explanation and the justification of Government action. This Trade Boards Act, however, was quoted early this year by Mr. Ramsay Macdonald in moving an amendment to the Address in favour of a national minimum wage as a precedent which had definitely committed Parliament to the principle he advocated: "As Parliament has begun," he said, "so it must go on." The Amendment was hardly treated seriously by the House, the spokesman for Ministers dismissing it with the remark that "from the Government point of view the great task of bettering the conditions of labour was not to be solved by the method laid down in the amendment." A month later the principle thus contemptuously dismissed was embodied by the Government in the Bill introduced as the "Coal Mines (Minimum Wage) Bill"—which has now passed into law. It is not my object to criticise here the Government's action. A convert should at least be given the credit of an open mind, but the phenomenal rapidity of this particular conversion renders it the more necessary to consider, apart from politics, of what nature is the appeal made upon us by the new faith. The economist must lay it down that the interference of Parliament with the wages of adult and organised labour is *prima facie* to be condemned as an infraction of the liberty of contract. The main precedent for such action on a large scale may be said to have

been created by the Irish Land Acts, which set up Land Commissioners to interfere in the agreements between landlord and tenant in Ireland, and authorised the arbitrary fixing of judicial rents. It may be argued that in that case the existence of tenant right, constituting to some extent a dual ownership, was an abnormal condition that justified or even necessitated Government intervention. Do the abnormal conditions of coal mining, of which we have heard so much during this dispute, constitute a difficulty that cannot be adjusted as between owners and men without resort to legislation?

A good deal of light may be gained as to the answer by a study of the official records of the progress of the negotiations lately carried on between the coal owners and the miners' representatives, and of the part played by the Government therein. It is instructive to observe how the demand for the minimum wage, originally confined to "abnormal places," was subsequently extended to cover all hewers, whatever their position, and independent of the amount of work performed; and finally, "all men and boys employed underground." The miners further demanded that the hewer working in an abnormal place should receive "full wages, the rate to be the average rate of wages previously earned by the workmen in normal conditions, which shall not be less than the recognised minimum or average rate paid in each district." Later, they tabled their schedules, and laid it down that the rates given therein admitted of no modification. It thus appears that while the owners have throughout been willing to admit the right of workmen employed in abnormal places to receive wages commensurate with the work performed—in other words, to give special consideration to such cases and to agree with the workmen the means by which such wages should be ascertained—the men's claims have gone far in excess of this; their price, like that of the Sibylline books, advancing with each refusal.

The position then is as follows: We have, from the coal miners, a definite claim for the minimum wage for all classes of workers, boys included. This claim has been sanctioned and made obligatory by the present Act, and in settling such minimum rate the District Board is enjoined to have regard to the average daily rate of wages paid to the workmen of the class for which the minimum rate is to be settled. Behind this we have the demand, already distinctly audible, for a minimum wage in every class of industry; Mr. Tom Mann and Mr. Ben Tillett

have already asserted it as their view that the profits of industry are sufficient to pay a minimum of £2 per week to every worker, irrespective of his capacity or output.

In the background, again, we discern the menacing figure of the new Syndicalism—which in South Wales has formulated its aims and objects in the pamphlet known as the “Miners’ Next Step.” The authors begin by defining their immediate demands as a minimum wage of 8s. per day for all men engaged in or about the mines, and this obtained, the hours of labour are to be reduced to seven per day. The ultimate object is the “elimination of the employer” by the use of “the irritation strike,” and the consequent “taking over and working of the mines in the interest of the workers themselves” (sec. xiii. and xiv., p. 26).

In the consideration of these demands we shall be inclined, I think, to take a wider and more sympathetic view of the claims and aspirations of Labour than would have been the case a generation ago. Economic efficiency will endorse the plea of moral responsibility in admitting and sanctioning a claim for a minimum wage in the sense of a “living wage”—defined as the wage on which a working man can live and support a wife and family in decent comfort, with a margin that enables him to lay something by to insure against sickness and old age; and, meanwhile, to enjoy such a share of leisure or recreation as befits a man who, besides being a toiler, is also “a citizen of no mean city.” Further than this it is difficult to go. I do not understand a minimum wage which is to be fixed, as in the case of coal-mining, with regard to the “average rate” paid in each district. The introduction of an “average” (the mean of the highest and lowest wages earned), appears to introduce elements entirely foreign to the idea of a “living” wage; nor does it seem possible to justify on the basis of a “living” wage the wide discrepancies between the figures proposed for the minima in different districts. One thing is certain, that the passing of the Minimum Wage Act is a step of the gravest importance to our industrial system, and one that may have consequences which its framers little foresaw. It may reasonably be predicted that Government intervention in this case, as in others, must involve a measure of Government control; it would seem to follow that Government must insist on some security for the performance of contracts to which they have practically become parties. The Federation funds can no longer reasonably be immune from claims for damages, and when unionists refuse to work independent labour must be encouraged to step into the breach. The coal miners may have to pay for

victory by loss of privilege. They will have to learn that if Labour has its rights (to paraphrase a well-worn axiom) it has also its duties, and that in a civilised State no class of industry can be permitted to "hold the nation to ransom," or to pursue what it deems to be its own interest regardless of the suffering such action may entail on other classes of industry, or of the loss and danger involved to the community at large.¹

EVELYN HUBBARD

BLIND-ALLEY LABOUR.

THE term "blind alley" has become a phrase of the marketplace; it is used often as a means of characterising the chief evil of juvenile labour, and is loosely interpreted to convey a multitude of sins. It is necessary, therefore, when public attention is being turned more and more to the problems of juvenile labour, to examine the nature of the "blind alley" and the real evils associated with it.

Blind-alley labour is boy and girl labour employed in an industry from which it will be ejected towards the end of adolescence. The blind-alley worker is one temporarily employed in an industry for a few years (the length of time varying from industry to industry) without at the end of the period obtaining a permanent foothold in it as an adult worker. The essence of the blind-alley job is that it is a juvenile job, offering little opportunity for absorption into the higher grades of the industry. A boy who enters an engineering shop, though he may not receive an all-round training such as apprenticeship is alleged to have provided formerly, has a reasonable chance of ultimately taking his place as a man in the trade, if not as a skilled engineer of some sort, at any rate as an engineer's labourer. On the other hand, a van-boy has but a small chance of becoming a carman, and even allowing for the fact that, in the case of railway companies, a proportion of them may be absorbed into other branches of the transport service (as porters, cleaners, &c.), there is still a considerable number who find themselves in a very few years superseded by younger boys, and are driven to find a market for their labour in other directions.

The case of the van-boy may be profitably examined a little further. As most vans carry both a man and a boy, the numbers

¹ I desire to express my indebtedness for material in the above paper to Professor Ashley's *Adjustment of Wages*, and to Mr. and Mrs. Hammond's *The Village Labourer*.

of each will be about the same. As, however, the normal proportion to ensure absorption would be about one boy to five men, it is obvious that, even making allowance for a possible absorption into other branches of some of the trades employing carmen, there must be a considerable proportion who will be turned adrift when their wages reach a maximum beyond which the employer will not go. This is borne out by the census statistics, by the recruiting statistics, and by the returns of distress committees, the latter of which show that in 1907-8 47.7 per cent. of the applicants started life as errand-boys or van-boys.¹ Many textile processes, packing, labelling, "laying on," &c., in printing shops, "drawing off" in saw mills, are other examples of what are usually considered "blind-alley" occupations.

It should be observed that it is not possible definitely to classify occupations into blind-alley jobs and others. There is probably no industrial occupation which does not provide relatively permanent openings for a number of the workers in it.

A proportion of the van-boys become carmen, a number of juvenile textile-workers become weavers, night picceners, &c., and, in the case of errand-boys, opportunities of being promoted to permanent employment are not wanting. In other words, to those who are fortunate enough to be drafted into the higher ranks of an industry, their juvenile occupation is not a blind alley. It is obvious, however, that some industries eject a far larger proportion of their juveniles than others, although even in such cases the term "blind alley" ought not to be applied universally. Some occupations prove to be blind-alley jobs, not necessarily because of an excessive proportion of juveniles to adults, but owing to particular circumstances. An office boy in a large firm will in all probability become a member of the permanent staff. The same boy, employed as sole assistant in a small office, is likely to find himself in a blind alley when he tries to raise his wages above the office-boy level. In a large number of instances (*e.g.*, in the juvenile textile processes), boys and girls find the "blind alley," so called, practically the only means of gaining entrance to the better-paid occupations, and in some firms the bulk of the employees commence their career as errand-boys.

The essence of the "blind-alley" employment, as already suggested, lies in its being confined within certain age periods. It is not a question of conditions of employment. There is no necessary connection between the blind-alley occupation and the

¹ See Medley, "Van Boy Labour." *Economic Review*, January, 1911.

conditions, possibly evil, under which it is followed. There are the same influences at work, harmful or otherwise, in the case of a worker who rises to a higher rank in an industry, as in the case of one in the same industry whose services are no longer required at the age of seventeen or eighteen. Further, it would be possible by industrial regulation to raise conditions of work considerably without affecting the central fact of the "blind alley"—insecurity of employment on the attainment of a certain age. It often happens, of course, that the "blind-alley" evil and harmful conditions are to be found associated.

It cannot be too strongly insisted that the "blind-alley" occupation is not necessarily an evil occupation in itself. The fundamental evil of such an occupation is in its throwing the labourers on the labour market, when they are no longer required, usually with little skill likely to be of industrial value in any other industry than the one in which they have been previously employed. The future of most of the "blind-alley" labourers appears to be that of the casual labourer, the unemployable, and the hooligan. Some, it is true, find their way into those industries, which are largely recruited from adults, but, in a great number of cases, the lot of the discarded labourer is less fortunate. A number drift into the army, not from motives of patriotism, or even through the glamour of military life, but from the force of stern economic necessity. Distress committees are overwhelmed with them. Some find their way into the already over-swollen ranks of casual labour; many, succumbing to the temptations of the street-corner, lead a precarious, and probably a criminal or semi-criminal existence.

How is the evil of the "blind alley" to be treated? In the case of some of these occupations it is probable that industrial developments, following on drastic regulation, might lead to their extinction. Indeed, it is probable that there are some for which, even at the present time, there is no justification except cheapness, and that a rise in wages might result in the adoption of improved methods or machinery. It is well to remember that it is not a century since the *Edinburgh Review* bluntly told the public that there were houses in which the chimneys could not be swept otherwise than by the climbing chimney boys. Architectural defects seemed to be an insuperable obstacle to reform; yet the climbing boy is a thing of the past. And if the legislature determined on the abolition of certain evil juvenile occupations in existence to-day, there is little doubt that the vitality of the industries concerned would be sufficient to ensure the

continuance of the trades under modified conditions. But whilst the abolition of the "blind alley" in many of its forms is eminently desirable owing to the evil nature of the influences surrounding these occupations, yet the total elimination of "blind-alley" jobs from our industrial system is not to be looked for. Quite apart from the question as to the possibility of doing without the juvenile job entirely, there is the question of providing a source of supply for essentially adult occupations.

The evil of the "blind alley" may be remedied to a large extent in three ways. In the first place, a greater measure of industrial regulation and more efficient inspection would do much towards minimising the demoralising influences which are common to many forms of juvenile labour, and which are a contributing factor to the relative uselessness of the ejected "blind-alley" worker. This field of governmental action has been largely ignored in recent years; not only has little progress been made, but existing legislation (*e.g.*, the Shop Act) is far from fully enforced. But improved conditions of work alone will not give industrial value to the "blind-alley" boy; and the second line of approach lies in the establishment of some system of training during the "blind-alley" period. The type of juvenile labour we are considering makes subsequent entry into any other but the lowest grades of adult labour difficult, because it gives little skill or aptitude of commercial utility. If, however, intelligence, adaptability, and that indefinable quality known as "handiness," be developed by means of some kind of continued education, coincident in time with the period of "blind-alley" labour, then the displaced labourer will be in a far stronger position to gain an entry into other occupations. No suggestion is here made of "teaching every boy a trade"; the object would be to counteract the harmful influences of industrial life, to maintain physical health and vigour, to exercise the mental powers, and thus remove the serious defect of arrested mental development which is such a common feature at the present time, to provide generously for "hand" training, and to awaken interests which will serve to overcome the cramping and narrow effects of many "blind-alley" jobs.

But under existing conditions as regards the hours of labour, no such training could be effective. It would be necessary, therefore, in the third place, to limit the hours of juvenile labour to admit of the possibility of continued education, and we are driven to the position of demanding a legal limitation of hours in order that the time thus set free might be devoted to preparation for adult

labour. Into the details of the work and organisation of continuation schools it is not necessary to enter here. All that need be said is to emphasise the necessity for reducing hours of work at the same time that compulsory continuation schools are introduced. Workers among youths and girls have seen the futility of driving them to evening schools after a full day's labour in mill, shop, or factory. The enactment of a law compelling attendance at continuation schools might conceivably lead employers to consider the advisability of reorganising their industries, if such attendance interfered seriously with hours of labour. In the North there are manufacturers who have abolished half-time labour in their mills on the ground that it is more trouble than it is worth. It is possible that to reduce the hours of work of what have hitherto been full-time labourers, may lead the manufacturers in their own interests to reduce the amount of "blind-alley," labour by the substitution of machinery, and of adult labour, and by improved organisation. These schools will not, however, entirely abolish the "blind alley," and steps must also be taken to ensure, as far as possible, continuity of employment. In other words, after training, the "blind-alley" worker must be assisted through the maze of industrial occupations to another job. At present the "dove-tailing" of the boy's job with the man's job is carried on haphazard, with considerable waste and leakage. There are many occupations which require only a few juveniles, and which are mainly recruited from adults or "juvenile adults." These, therefore, are the industries to which the superseded juvenile worker should be turned. There are other industries in which the period of apprenticeship (determined more or less by tradition) might be reduced. Whatever may have been the requirements of the past, modern developments in machinery and specialisation render a lengthy period of apprenticeship unnecessary. At the present time, many trades in which apprenticeship is required are already recruited from the "blind alley," because the age of entry (fifteen or sixteen) is considerably above the school-leaving age, and boys fill in the intervening time in what are to them merely temporary jobs. This has not been considered satisfactory, and, indeed, it could hardly be so, for the two years or so prior to apprenticeship are spent without any sort of supervision whatever. With the establishment of continuation schools this lack of control would not exist, and the practice of entering a trade as an apprentice after a period of "blind-alley" work might be extended. It is certain that in a number of industries the age of entry might be raised to seven-

teen, or possibly eighteen, without impairing efficiency. In this manner an opening would be provided for the "blind-alley" labourer possessed of sufficient intelligence and capacity to become a skilled worker.

To bring the superseded "blind-alley" worker and the adult occupation together is, of course, the task of the Labour Exchange and its voluntary committees. The work of the Juvenile Advisory Committees cannot be considered finished until the young persons who have passed through their hands are placed in a reasonably secure occupation, so far as can be determined by a knowledge of existing industrial conditions.

ARTHUR GREENWOOD

A REPLY TO PROFESSOR EDGEWORTH'S REVIEW OF PROFESSOR
H. L. MOORE'S "LAWS OF WAGES."

IN reviewing my *Laws of Wages* Professor Edgeworth has said: "This is the first time, we believe, that the higher statistics, which are founded on the Calculus of Probabilities, have been used on a large scale as a buttress of economic theory." Furthermore, after summarising the chief results in which the methods of correlation were used, he has given the weight of his authority to the statement that "these numerical results appear to us to be of value as illustrating and confirming economic theory." And still further on, referring to the results obtained by the methods of contingency and the correlation ratio, he has said, "a value similar in kind, if less in degree, attaches to the less exact measurements of association which Professor Moore has exemplified." From this general description of the work he excepts "one part, the chapter which purports to verify the hypothesis that differences in wages correspond to differences in 'efficiency' (or 'general sagacity and energy')," and he expresses his dissent with Edgeworthian vigour and incisiveness.

I shall attempt to meet his criticism of this one point.

It is difficult for one not familiar with Professor Edgeworth's writings on the theory of skew curves, and with the details of the method employed in the chapter under criticism, to grasp the point of his argument on pp. 68-70 of his review (*THE ECONOMIC JOURNAL*, March, 1912). I shall, therefore, endeavour to meet his conclusion in an indirect way. I shall not evade the point in his argument, but I shall reach it only after I have placed in clear light my own problem.

Pure economic theory is responsible for the doctrine that in a *régime* of competition the dividend going to labourers in the form of general wages is divided among them according to their differential general sagacity and energy. The most complete recent statistical survey of the earnings of labourers has led to the conclusion that "cette valeur relative (du salaire) dépend essentiellement de la rareté des aptitudes intellectuelles et physiques nécessaires à l'ouvrier, du degré de développement de ces mêmes aptitudes qu'exigent les diverses professions." Now I maintain that until the above economic doctrine is connected with the statistical facts, the differential theory of wages is pure dogma, and the statistical conclusion quoted above is mere assertion. A glimmer of light upon this question would more than repay the expenditure of much time and thought.

My own attempt to deal with the problem Professor Edgeworth has met with the sarcasm of employing a steam-engine to crack a blind nut (*loc cit.*, p. 70); the imputation "of having overlaid a simple matter with useless and cumbrous technicalities." Professor Edgeworth is the first economist who has professed to regard the problem as a "simple matter." I must, therefore, have failed to make clear the real question before him. Let me state a problem: The adult male population in a given city of varied manufactures is made up of skilled and of unskilled labourers in equal numbers. Many samples of one hundred labourers are taken at random, and the mean results of wage-receiving are found to be as follows: The total wage dividend is 586.4 francs; the minimum wage is 2.36 francs; the skilled labourers gain 60.18 per cent. of the dividend. If the labourers are paid according to the economic theory of differential sagacity and energy, what is the equation to the curve describing with greatest probability the distribution of wages? What are the mean actual wages of the several members of the sample of one hundred?

This is precisely the problem to the solution of which the chapter under discussion is addressed.

Now with reference to this problem I submit:—

(1) That the principle of its solution is a principle that will enable one to bring the differential hypotheses to a test of the actual facts of industry. I have not said that it would supply an *experimentum crucis*.

(2) That nowhere in economic literature is there a solution of this problem, or of a problem involving the same principle.

(3) That until a direct demonstration is supplied that actual

wages do or do not correspond in a quantitative manner with differences in general sagacity and energy, my own study, which is based upon the theory of probability, deserves more careful study than Professor Edgeworth seems to have given it.

The differential problem is not "a simple matter"; it has never been completely solved.

We come now to Professor Edgeworth's more detailed criticism. The points are as follows:—

(1) The introduction of the Galton-Pearson theorem "appears to us superfluous, not to say misleading" (p. 70). That theorem Professor Edgeworth has properly described as being concerned with "the probable differences between the successive members of a normal group (ranged in their order of magnitude)" (p. 70).

The reply is that the differential law of wages, which is the question under investigation, is a law having reference to the differential capacity of labourers. The introduction, in my investigation, of the Galton-Pearson theorem referring to differences between members in a normal group can be shown to be *superfluous* only after proof has been submitted that some other hypothesis referring to differences between members of a group of labourers has a higher degree of probability in its favour. Its introduction can be shown to be *misleading* only after proof has been submitted that its use is not in accord with the facts of actual industry.

(2) The whole of Professor Edgeworth's argument against my method is an argument by analogy. He starts (pp. 68-9) with certain normal curves of weight and wages, and shows how in a "roundabout manner," if certain assumptions are admitted, the one curve may be deduced from the other. He then moves to skew curves and suggests that, though the problem becomes more complex, still by a "roundabout" method, admitting certain other assumptions, the wage curve may be deduced from the data of the weight curve. He supposes that I have followed the "roundabout method" he has described, and wishes to infer that by means of the method I have adopted it might be proved that, say, wages depended upon weights!

My reply is that the few lines in which he sketches his analogy are hardly ample enough for me to say that at this point there is divergence between us, and that he has introduced the very fallacy of which he wishes to convict me. With the detailed description of my method before him, Professor Edgeworth has denied the relevancy to the problem in hand of the particular part that, in my own view, constitutes its distinctive merit, namely, the mea-

surement of the probable difference in the sagacity and energy between the members of a working group. He attempts to show a defect in the method, not by direct criticism, but by an argument by analogy! Nor is this all; his argument by analogy leaves out of consideration the Galton-Pearson theorem which is the foundation of my investigation. Professor Edgeworth is too accomplished a logician not to know that such a form of criticism of a complicated argument invariably introduces "adventitious involutions" (p. 70).

I am anxious, however, to meet the point which I think Professor Edgeworth has in mind. The trend of his argument by analogy is that, by following my method, a similar agreement might be found between ability and stature. My reply is that he is led to urge this argument simply because he fails to see the economic relevancy of the Galton-Pearson theorem. Every step in my method of rising from differences in degrees of capacity between members of a group of labourers to the curve descriptive of their wages has its counterpart in the process of actual wage-earning; the argument about weights and wages, and ability and stature, deals only with the formal properties of a skew curve, and its various steps have no concrete significance.

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Professor Moore has fairly summarised the criticisms of which he complains. He has not been prevented by the reviewer's use of analogy from apprehending the main purport of the review. The main purpose of Professor Moore's protest is presumably to show that the alleged analogue of his principal argument does not resemble that argument in material respects. The question is whether the relation between degrees of capacity and the scale of wages which is referred to in the last sentence of the protest is substantially identical with that relation between degrees of weight and degrees of other attributes which was presented in the review. On this general question it seems to the reviewer unadvisable to add much to what has been said in the review. To characterise Professor Moore's argument in greater detail would but multiply points of controversy. The question is referred to the impartial reader, with one additional suggestion as to the conduct of the inquiry. Let it be examined whether Professor Moore has shown, or even attempted to show, the existence of *correlation* in a technical sense between the compared phenomena.

If not, does the argument amount to more than this: wages are distributed in (approximate) accordance with the normal law of error; so are (presumably) degrees of capacity: therefore, the two phenomena are causally connected?

So thin an argument could not have passed muster had it not been disguised in the manner suggested by the reviewer. It was not suggested—as Professor Moore seems to suppose—that the real relation between capacity and wages was a simple affair; it was only his method of ascertaining the relation that was regarded as simple—when divested of disguise. Because a simple, or “simpliste,” method of treating a subject is adopted, it does not follow that the subject is simple. Doctor Sangrado, under whom Gil Blas practised, no doubt often prescribed for difficult and complicated cases; but his prescription was uniformly simple—hot water and bleeding. The worthy doctor concealed from his patients, and perhaps from himself, the simplicity of this treatment under the disguise of learned circumlocutions.

The accessory elements in the chapter under consideration are, in themselves and apart from their tendency to disguise the main argument, for the most part sound enough. Such is the unfamiliar presentation of the normal law, wherein the magnitude which is usually represented by an *area* is taken as the independent variable. To fix the ideas, let X represent a measurable attribute, such as height, measured, say, from the average height of a normal group. Let Y represent the number of individuals having a height between O (the said average height) and X . Then Y , considered as a function of X , is represented by the curve which Galton denominated an *ogive*. The equicrescent variable being X , we have corresponding to any increment ΔX the increment $\Delta Y = \frac{dY}{dX} \Delta X =$, say, $f(X) \Delta X$, or $y \Delta X$, where y is the ordinate of the normal curve as usually presented, X the abscissa. But there is no objection to considering X as a function of Y , and constructing a new curve, with the co-ordinate x , representing $\frac{dX}{dY}$ as dependent on Y . In fact, the conception may be very serviceable. To give a fanciful instance, if Xerxes, before passing his army by detachments into an enclosure just admitting a certain round number (10,000 Herodotus asks us to believe, but a smaller ΔY is probably nearer the fact, as well as better for our purpose),—if the royal statistician could previously have arranged the host in the order of the men’s heights, what an interesting piece of anthropometrical statistics might have resulted! This way of

looking at the normal law of error is suggested by the tables in the appendix to the chapter under consideration and the relevant passages in the text. But in commenting on Professor Moore's thesis, it may be well to recall the saving clauses inserted in the review: "as we interpret" . . . "if our interpretation is correct." The reader must make allowances for the sort of difficulty which Mill felt in presenting a doctrine from which he dissented (that of overproduction), "the difficulty in giving any statement of it which shall be at once clear and satisfactory to its supporters." With this reservation, we may describe the table "upon which the investigation of this chapter is based" (*loc. cit.* p. 82), that is Table II. of the Appendix, as dealing with two portions of a "Gaussian" (or normal error) curve. The first part of the table, comprising columns I. to IV., relates to the portion of the curve above the median up to the point of which the abscissa is 2.04 times the standard deviation (*loc. cit.* p. 87). The corresponding area is about .994 of the total area above the median. If now we divide the area thus limited by 50, we have for ΔY in the sense above explained, .01988 of the total area above the median. The corresponding values of ΔX may be calculated from well-known tables. The most convenient for the purpose is one given by Mr. W. F. Sheppard (*Biometrika*, Vol. II., p. 189, Table III.), in which the area, being treated as the "argument," or independent variable, the corresponding values of the abscissa are tabulated (up to area .8). If we may regard Professor Moore's first column as designating the successive values of the equi-crescent independent variable Y , the second column will present x in the signification above assigned. With the aid of Mr. Sheppard's Table III. we can (with some little adjustment) write down the values of X and of ΔX corresponding to successive increments of Y . In fact, as Professor Moore has told us, the majority of the entries in his second column, all except the five extreme ones, might have been obtained from Mr. Sheppard's tables. He himself obtained the majority of the entries by a formula which is derivable from our conception of the subject (namely, $\frac{s}{ny_m}$, where s is the standard deviation pertaining to the

Gaussian curve, n is the number of entities whose frequency is tabulated, y_m is the ordinate of the error-curve with standard deviation unity, at the point of which m is the abscissa. This expression will be found to agree with our expression for $\Delta X = \Delta Y \frac{dX}{dY}$, where $\frac{dX}{dY}$ is the reciprocal of $\frac{dY}{dX}$, that is the

a Gaussian curve. Of course it does, if it is deduced from columns IV. and VIII., which are deduced from columns analogous to the I. and II. above explained, which presuppose the fulfilment of the normal law.

It remains to advert to the relation between the two parts of Table II. Professor Moore has employed a mode of representing statistics of frequency which is generically described by Mr. Elderton as "the use of half one normal curve for positive and half another normal curve for negative frequencies" (*Frequency-curves*, p. 160). "Obviously there is no theoretical basis," continues Mr. Elderton: "... the two parts become meaningless." Especially is this true in the judgment of those who with the present writer hold that the normal law is generated by the interaction of numerous independent agencies—a genesis from which there would not be evolved the mongrel form under consideration. On account of its very inaptness this method was employed in the *Journal of the Statistical Society* (1899, Vol. LXII., p. 375 *et seq.*, p. 534) to show that a fairly good fit might be obtained from a formula which had no claim to be the true one. This sort of test has been carried further by Professor Moore in that he employs a particularly unpromising variety of this inelegant species. In the composite curve adduced in the *Journal of the Statistical Society*, it was arranged that the two branches should have the *mode*, or greatest ordinate in common; so that the contour of the group should present the usual features of a frequency-locus, a single maximum on either side of which there is a continual slope downwards. But in Professor Moore's construction (as to which see review, p. 69) the contour of the frequency-locus will in general be broken by a vertical step—like a geological *fault*. A roof so shaped is apt not to be watertight. Yet it is remarkable how well this misshapen form can be fitted to concrete statistics. The principal outcome of the chapter, as observed in the review, is to "illustrate a not particularly good method of representing statistics."

Altogether the review admits of defence at every one of the points at which it has been attacked. And yet it may well be that the reconsideration of the subject demanded by the author's protest will redound to the discredit of the review. For one of its principal features was the marked contrast between the general excellence of the book reviewed and the exceptional character of one chapter. This antithesis will now be suspected of exaggeration. Whatever other analogies presented in the review the reader may accept, he will reject the suggestion that

the defects of the chapter in question may be treated like clerical errors in an otherwise perfect examination-paper. Rather, the expert reader will find it hard to believe that the author of this chapter can have handled with any extraordinary skill *correlation* and the other delicate instruments of mathematical statistics.

F. Y. EDGEWORTH

OFFICIAL PAPERS

Report of the Commissioner of Corporations on the Steel Industry. Part I., Organisation, Investment, Profits, and Position of United States Steel Corporation. (Washington : Government Printing Office. July, 1911.) Part II., Cost of Production, Preliminary Report. (Washington : Government Printing Office. January, 1912.)

Report of the Commissioner of Corporations on the Tobacco Industry. Part II., Capitalisation, Investment, and Earnings. (Washington : Government Printing Office. September, 1911.)

THE wisdom of the Sherman Act and the American Government's anti-trust policy is open to doubt, but there is one by-product of that policy which deserves a welcome from everyone who wishes the truth about modern industry to be widely known. The establishment of a Bureau of Corporations, whose function it is to collect and publish information about industrial combinations, cannot fail to be of assistance to students of economics.

The reports before us do not, it is true, add much to our general knowledge of trusts and monopolies; but they contain much interesting information which illustrates, among other things, the danger of generalising about trusts at all widely. The two combinations with which they deal resemble each other in certain particulars, but they differ in others; and the points of difference are, on the whole, more important and more remarkable than the points of resemblance. Whether the contrast is great enough to secure for the Steel Corporation a more favourable verdict from the courts than that which was passed on the Tobacco Company remains to be seen.

Perhaps the most noticeable feature common to the two trusts is this : each of them owes its position, in part at any rate, to the more or less exceptional characteristics of the industry in which it is established. In the tobacco trade (as in the thread trade)

the abnormal importance of brands assists the acquisition of monopoly power. The strict limit which nature has set to the supply of iron ore, and the concentration of the sources of that supply in a comparatively narrow area, make it easy in the steel industry (as similar conditions do in the case of oil) for a single interest to get control of the raw material, and, consequently, of the market for the finished product. The importance which the Steel Corporation attaches to the possession of ore reserves is well illustrated by the exorbitant price which it gave for the Great Northern lease. In 1907 the Corporation took over a huge tract of ore land from the Hill railway interests; for the lease of this property it agreed to pay an enormous royalty: the rate per ton of ore was, in fact, twice as great as the average rate which it paid on other lands acquired since that date in the same district. The Bureau is probably right in concluding that "the only reasonable explanation of this extraordinary transaction" was a desire on the part of the Corporation to head off competition. Neither of these great combinations, then, affords evidence for the view that the economies of large-scale production are by themselves sufficient to cause the establishment of a monopoly. No doubt the enlarged scale of production has in both cases resulted in great savings; so far, however, as either group of interests approaches to a monopoly its power is due to other causes.

But, as a matter of fact, the Steel Corporation has not anything like complete control over the industry. In this respect it differs from the Tobacco Company. The Corporation's share in the output of steel ingots and castings was, in 1910, 54 per cent. of the total for the country. This figure shows a considerable falling off since the establishment of the combination, for in 1901 its proportion was 66 per cent. The trust had, indeed, lost ground in every branch of the trade in which it engages; (pig-iron was the one exception, and even there it had only just maintained its position). The Tobacco Company, on the other hand, produced, in 1908, as much as 82 per cent. of the cigarettes and 79 per cent. of the manufactured tobacco and snuff made in the States, while in no branch of the trade in which it took part (except the large cigar business) did its share amount to less than 60 per cent. Moreover, unlike the Steel Trust, it had steadily crushed out or absorbed independent producers. Thus, in 1899 it manufactured only 54 per cent. of the total output of tobacco and snuff, as against 82 per cent. in 1908, while the corresponding figures for little cigars were 55 and 89 respectively. It had lost ground in the home market for cigarettes, but this was due to

the increasing popularity of Turkish brands, the production of Virginians having been almost entirely under the trust's control throughout the period. The Tobacco Company, then, had acquired a virtual monopoly, while the Steel Corporation had not. It must be remembered, however, that the Steel Corporation, although in 1910 it produced only about half the country's output of ore, has effected what practically amounts to a corner in the reserves of Lake Superior ore, so that there is every prospect of its attaining a monopoly in the future. It has, moreover, price agreements with the independent producers of iron and steel.

The monopolistic position of the Tobacco Company appears all the more serious when we consider that the company itself was controlled by a very small group of shareholders. The Consolidated Tobacco Company (which was founded in 1901 to take over the old American and Continental Companies) seems to have been organised principally for the benefit of these persons. The operation was conducted by the officers and directors of the constituent concerns—men who had exclusive information and presumably foresaw the forthcoming reduction of the internal-revenue tax on tobacco. The other owners of common stock were induced to exchange their holdings for bonds in the new company. The promoters of the scheme thus received for themselves practically the whole advantage which accrued to the combination when the tax was reduced in 1901 and 1902. The holders of the Consolidated common stock retained control in the re-constituted concern known as the American Tobacco Company, and made the best of their opportunities. In the years 1908–10, though the common stock formed about one-sixth of the entire capitalisation of the company, it received nearly one-half of the entire earnings as dividends, and “less than a dozen holdings” (we are told) “divided among themselves 65 per cent. of the surplus profits above fixed charges.” There is little doubt that much of this profit was monopoly revenue. When the excise duty was reduced, prices remained practically stationary, and the consumers simply paid the tax to the monopolists instead of the State: such an arrangement was naturally lucrative to the combination; the rate of profit on total assets (as estimated by the Bureau) rose from 8·5 per cent. in 1899 to 20·6 per cent. in 1903; since then it had, up to 1908, only once fallen below 20 per cent.

Compared with these figures, the profits of the Steel Corporation are moderate; during the ten years 1901–10 the rate of profit on the “total investment in tangible property” varied between a

minimum of $7\frac{1}{2}$ and a maximum of 16 per cent., the average for the period being 12 per cent. So far as there was any tendency to change it was downward; the rate of earning was $12\frac{1}{2}$ per cent. for the first, and $11\frac{1}{2}$ per cent. for the second five years. The rate on nominal capital was, of course, lower in both cases, and this fact naturally leads to the vexed question of capitalisation.

The subject is dealt with at length in the reports before us. The investigation has been undertaken with a twofold object: it is directed towards ascertaining about each combination first, what is the rate of profit earned on the money actually invested in the industry, and secondly, how much of the capital issued represents anticipated monopoly profits. The Bureau has not proceeded on the same lines in the two reports. The capitalisation of the Steel Corporation is compared with three estimates of "the actual value of [its] physical properties in 1901." The estimates have been arrived at in the following manner: "*first, by organisation history*—that is, from historical study of the organisation and investment of the constituent concerns at the time of their formation; *second, by the market value of securities*—that is, by computation of the value of the properties of those constituent concerns as reflected in the market value of their securities; *third, by departments of business*—that is, by a detailed estimate of the physical properties of the company, by departments of its business." Now the first and third of these valuations are not satisfactory for either of the purposes which they are designed to fulfil, since they make no appreciable allowance for goodwill. Surely a capital issue may be said to represent "actual investment" (in the ordinary sense of the term) if its par value merely covers all valuable considerations actually purchased. The goodwill of the firms bought out by a combination is "value received" no less than their plant is. Some of it may have been obtained by the constituent firms at little or no expense to themselves, and may not, therefore, represent an investment on their part; but the combination, in purchasing it, does make an investment. Some allowance ought accordingly to be made for it when the *combination's* investment is to be contrasted with the *combination's* capitalisation, and this is what the Bureau set out to do: it would be pointless (even if it were possible) to contrast the *combination's* capitalisation with the investments made by its *constituent concerns* before it came into existence. The best available valuation of the assets that were made over to the Corporation by the firms of which it is composed is, then, the aggregate market value of their securities averaged

over a period before the Corporation was organised. As its second estimate the Bureau gives the average for a period of twelve months. The result is to put the Corporation's investment at \$793,000,000, as against \$676,000,000 and \$682,000,000 yielded by the first and third methods respectively. This would make the excess of capitalisation over the value of assets \$610,000,000 instead of \$720,000,000 odd. These figures refer to the beginning of the trust's career. Since 1901 a conservative financial policy has been pursued, with the result that in 1910 capitalisation exceeded the value of tangible assets by only \$281,000,000. The blemishes in the Corporation's financial record have been due to the intervention of banking, as opposed to industrial, interests. Mr. Morgan's connection with the concern, first during its promotion and later in carrying through the notorious bond conversion plan, resulted in operations which compare unfavourably with the general trend of its policy.

The Bureau's estimates are not more satisfactory in ascertaining the amount of capital which was issued against anticipated monopoly revenue. It is obvious that, unless all the earnings which accrued as a result of goodwill even to the constituent firms are to be regarded as monopoly profits, the difference between the value of the Corporation's tangible property and its capitalisation does not represent the amount of the capital issued on the security of monopoly profits. In a sense, of course, *all* such earnings are monopoly profits: they arise because every firm in every industry has fenced off for itself a part of the market, has staked out a claim on which other firms cannot trespass; they may thus be said to result from the elimination of competition, and therefore from the existence of a limited monopoly. But it does not follow that they are "monopoly revenue" in the ordinary sense of the term, for they may be necessary to call forth the services in return for which they are paid. Now the Bureau set out to investigate the combination with a view, ultimately, to deciding whether it ought to be dissolved: for this purpose it would be irrelevant to inquire how much of the combination's capital represented monopoly profit in the wide (and unusual) sense in which it includes all earnings due to goodwill; the important question is this: How much was issued against the additional profits which were expected to accrue from combination? How much, in other words, represented "merger value"? This question can best be answered by comparing once more the market value of the constituent concerns' securities with the capitalisation of the trust. Many

of the constituent firms were combinations themselves, and the value of their securities was, no doubt, due in part to the merger value of their assets, and, perhaps, to the capitalisation of anticipated "monopoly revenue" in the strict sense. If, therefore, the Bureau's intention was to eliminate from the Corporation's assets *all* merger value or *all* monopoly profits, the market value of the securities is not an adequate estimate; but the Bureau's evidence was intended to bear on the question, ought the Corporation to be split up into its constituent concerns? In answering that question it is unnecessary to inquire how much of the *constituent concerns'* earnings are due to combination and monopoly; it is only essential to investigate the merger value which arose *from the amalgamation* of those concerns in the Corporation. It must, of course, be remembered that this merger value is not necessarily monopoly profit nor secured by illegitimate extortion from the consumer; when its amount has been ascertained the causes from which it arises remain to be investigated before judgment can be passed on the trust.

A first step in this direction has been made in the second part of the report. The cost of producing the chief raw materials and finished products of the steel industry has been ascertained, and an interesting comparison made between the figures for large and small companies. In so highly integrated an industry a difficulty naturally arises over the book profits, which are entered when goods are handed over from one subsidiary concern to another within the same industrial unit. These "intermediate profits" have been, for the purpose of comparison, eliminated from the "cost of production." The costs thus ascertained are considerably lower for large than for small companies: a ton of Bessemer pig-iron costs a large firm \$11.93 to produce, while a small firm spends \$14.21 on the process: the corresponding figures for large Bessemer billets are \$17.56 and \$21.69 respectively. The difference between the two groups of companies is due, in part, to the fact that in the figure for the smaller companies are included profits paid to other concerns for services which in large companies are performed by the firm for itself: the large firm, for instance, supplies itself with ore, while the small firm has to buy its raw material on the market,—often from a larger competitor. On the other hand, "transportation profits" have not been eliminated from the figure quoted for large companies, though the Steel Corporation controls a railway system. The evidence, then, shows that while the advantage of large firms is, in part, due to the economies of large-scale

production, part of it is to be explained on the ground that the large companies (notably, the Steel Corporation) possess reserves of ore, and control transportation facilities, which they use to extort profit from their smaller rivals,—thus raising the latter's cost of production. The comparative importance of these factors cannot be determined from the *data* published in the report.

The Bureau has not adopted any simple or uniform method in investigating the capitalisation of the Tobacco Trust. Goodwill is, in this case, so obviously important a factor that a valuation of physical assets would have been useless as a test of "actual investment." Data as to the value of shares in the constituent concerns were not forthcoming; nor apparently were figures as to their earnings—capitalisation of which would have been another good method of arriving at the value of their assets. The Bureau has accordingly taken each important purchase in turn and has used such information as is available in each case to determine, more or less arbitrarily, the "value received." The figure thus obtained cannot be accepted as an accurate measure of true investment, nor the amount by which it falls short of the capital issued as a precise estimate of the capitalisation of the profits that were anticipated from combination. The Bureau has, however, demonstrated fairly conclusively that a considerable part of the combination's capital was issued against merger value. We will take as an example one instance out of many in which such issues occurred. When the Continental took over the plug business of the old American Company—the two concerns were substantially under the same control—it issued securities to the amount of \$18,500,000 par value against the goodwill of the business: this was six times the value of the tangible assets received; at the same time the American wrote nothing off its books on account of the intangible assets handed over, though, as is observed in the report, "obviously no increase in the real good-will could result from the mere transfer of the business from one concern to another." The use which the combination made of the reduction in the internal-revenue tax suggests that the dividends on some, at any rate, of this "water" were obtained by an anti-social exercise of monopoly power. The combination did not, like the Steel Trust, pursue a conservative policy in writing off goodwill.

So far, then, as concerns the features with which these reports deal, the contrast between the two concerns could hardly be more complete. In the period covered by the investigation the tobacco combine (that is to say, the small ring of financiers who control

it) acquired a practical monopoly of the trade in which it engaged ; it steadily eliminated competition ; its capital was always heavily watered ; its profits were enormous ; it used its power to keep prices above their normal level. The Steel Corporation, on the other hand, though it occupied a predominant position in the industry, actually controlled only about half the total output of the class of goods which it turns out ; the output of its competitors grew faster than its own ; though its capital contained much water at the outset, it managed, by conservative finance, to reduce the excess of capital over the value of its physical assets to a figure which is not an unreasonable estimate of the value of goodwill ; its profits on actual investment were comparatively moderate.

G. F. SHOVE

National Monetary Commission of the United States.

It is announced that the paper-covered documents (over forty in number) which have been issued by this Commission are to be published in twenty-four cloth-bound volumes. They will be sold in sets at \$45.

Statistique des Grèves et Lock-out en Belgique, 1906-1910.
(Bruxelles : Office du Travail. 1911. Pp. lxiii + 345. Fr. 3.)

THIS is the third quinquennial volume, in which the statistics of strikes and lock-outs, published monthly in the *Revue du Travail*, are collected and summarised.

Report on Trade Unions in 1908-1910, with Comparative Statistics for 1901-1910. [Cd. 6109.] 1912. Price 1s.

THIS, like previous reports of the series, contains a general report covering the last ten years and detailed figures for the last five or ten years, according to the information given. The former has two sections, as before, dealing with all Trade Unions and with the Hundred Principal Unions respectively. The latter in 1910 included 1,459,687 members out of 2,435,704, or just under 60 per cent., a rather lower percentage than in 1907. The detailed figures give the membership of every Union, Federation of Unions, and Trade Council between 1906 and 1910, and full details of income, expenditure and benefits of the hundred principal Unions between 1901 and 1910. One important new feature consists in the special returns made for 1908 of the payment of unemployed, sick, and accident benefit, from Unions containing over 99 per cent. of the total membership.

The years 1908-10, with which this report more particularly deals, experienced a period of exceptionally bad trade, followed by a partial recovery. So far as membership is concerned, however, its effects were largely offset by the continuance of that general progress of Trade Unionism which since 1895 has been more or less independent of fluctuations of employment. The only important exceptions are the Building Trades, for the Unions of which numbers have declined enormously since 1900, whilst the Mining and Textile Unions have made a huge advance since 1898.

The total membership was 2,419,806 in 1907, fell by 36,572 in 1908, and by 20,794 more in 1909, but reached 2,435,704 in 1910. This increase on 1907 was rather more than accounted for by female members, whose numbers rose from 204,526 in 1907 to 221,283 in 1910. The chief increases were for miners (25,976), textile operatives (21,658), the printing group (5,718), transport workers other than railway servants (16,032), employees of Public Authorities (8,214), and shop assistants (10,195). The membership in Building Trades fell from 191,908 to 155,923, in the Woodworking Trades from 44,888 to 38,836, and in the chemical, glass, and pottery industries from 18,522 to 15,988. Special reasons probably explain the decline of 22,000 in the number of railway servants. In the Metal, Engineering, and Shipbuilding Trades three of the mains groups show a slight decline, and one (iron and steel) a small increase. Some of the smaller metal trades, however, such as tinplate working, cutlery, and lock-making, show rather heavy losses, and the "Other Metal" group declined by 4,625 (14·3 per cent.) on 1907 and by 8,313 on 1901. The detailed tables for different trades are interesting, but the summary table of increases or decreases between 1907 and 1910 might have been improved by giving the numbers in each group for both years.

In the number of separate Unions the decrease of previous years continued, but the change has been mainly brought about by the amalgamation either with one another or with larger bodies of small Unions, whose separate existence is often a cause rather of weakness than of strength to Trade Unionism. Indeed, a special attempt has been made to produce this good result. "Efforts have been made during recent years by a Joint Board, not only to bring about the amalgamation of existing Trade Unions, but to discourage the formation of new ones in trades where Unions already exist. In cases where such Unions have already been formed, they have failed to obtain recognition either

by the General Federation of Trade Unions or by the Parliamentary Committee of the Trade Union Congress" (p. xxii.).

Income and expenditure in the Hundred Principal Unions were largely affected by the very large increase in membership in 1906 and 1907, of which the full benefit in income was not obtained till 1908, and by the very severe depression of trade (1908-9) and prevalence of industrial disputes (1908 and 1910). Therefore, the total income (£2,497,428 in 1907) rose to £2,746,094 (1908), fell to £2,563,519 (1909), and partially recovered to £2,691,277 (1910). Per head it was 34s. 2d., 38s. 2½d., 35s. 11½d., and 36s. 10½d. respectively. There was an enormous increase in expenditure, from £2,055,991 (28s. 1½d. per head) in 1907 to £3,210,530 in 1908 (44s. 8d. per head). In 1909 and 1910 it was between £2,600,000 and £2,700,000, or rather under 38s. and 36s. per head respectively. The result was a net decrease of £520,000 in the funds of these Unions. Working expenses and sick and accident benefit only showed a slight increase per head in 1908-10 over previous years. Superannuation benefit, with a larger proportion of members becoming eligible for it, continued to show the steady increase of previous years. It is also more directly influenced than is sick benefit by the state of employment. On the other hand, dispute benefit averaged 5s. 2½d. per head for these three years, or nearly double the average for the decade.

Unemployment benefit in the Principal Unions can now be compared with that paid by nearly all Unions in 1906 and 1908. For the former, the amounts were £1,004,685, £944,802, and £695,774, or 13s. 11¾d., 13s. 3d., and 9s. 6¼d. per head in 1908, 1909, and 1910. Only once during the decade had so high a *per capita* expenditure been reached, namely, in 1904 (10s. 11¼d. per head). For all Unions the amount in 1908 was £1,257,913 (10s. 7¾d. per head), and in 1906, £516,900. The smaller figure per head is due to the fact that a much greater proportion of members were eligible for unemployed benefit in the Hundred Principal Unions. The high figures for 1908-10 are the more remarkable when we remember that in the decade 1901-10, taken as a whole, employment was less good than usual. Other features of interest are the figures of the number of members eligible for unemployed, and sick and accident, benefit, and the duration, and weekly rates of payment to which they are entitled. Tables of the monthly unemployment percentages for the last ten years would improve this excellent piece of work.

Report on Industrial and Agricultural Co-operative Societies in the United Kingdom. [Cd. 6045.] 1912. Pp. 273. Price 1s. 8d.

THIS report marks a very great advance on the earlier one of 1901. The report itself, apart from the charts and tables, is some fifty pages in length. Not only is every section of co-operative effort described and explained with great clearness, but also the divisions are logical. Agricultural societies are usefully distinguished as Purchase and Sale societies on the one hand, and Productive societies on the other. The stores and their connections are grouped together as associations of consumers, and the workers' productive societies, a unique form of co-operative effort, are kept quite distinct. As the result of this last distinction, the percentages relating to the control exercised by the co-partnership employees on the committees of management are of real value.

Turning now to the contents of the report, we find uninterrupted progress in almost every direction. The total membership of all co-operative societies has increased from over 1½ millions in 1895 to over 2½ millions in 1909. The co-operative stores supply, of course, by far the biggest portion. The most notable feature in their record is the increase of output by the productive departments of the retail stores and the two wholesales. Although but few of the stores practise profit-sharing with their employees, yet the position of the latter, both as to hours and wages, has in recent years been the object of special attention by the Co-operative Union; and the statistics compiled from the returns made to the Amalgamated Union of Co-operative Employees indicate that the stores are good employers. Agricultural co-operation, which in England was a mere experiment in 1899, is now an established success. Dairying societies predominate in Ireland, trading societies in Great Britain. Figures are given of the sales of "agricultural, trading," and other societies, but the reader should note that these sales are mainly on account of the purchase of agricultural requirements by associated farmers. Co-operative sale, in the sense of the co-operative marketing of raw agricultural produce, is still in its infancy.

The two newest departments of co-operation are the Small Holdings and Allotments Co-operative Societies, and the Tenants' Co-partnership Societies. The former have found their field of action in assisting to carry out the Small Holdings Acts of 1907, 8, and they have received substantial assistance from the Board of Agriculture in the matter of grants for purposes of organisation. The latter constitutes the Garden City movement which has been

so brilliantly pioneered by Messrs. Henry Vivian and Aneurin Williams.

Some appendices at the end of the report supply valuable information with regard to propagandist associations, specimen rules of societies, specimen balance sheets, and co-operative literature in this and other countries.

In conclusion, let it be said that the very best thanks of all co-operative students are due to Mr. G. S. Barnes, under whose signature this report is presented to the Secretary of the Board of Trade.

C. R. FAY

Report of an Inquiry by the Board of Trade into the Earnings and Hours of Labour of Workpeople of the United Kingdom. VII.—Railway Service in 1907. [Cd. 6053.] 1912. Price 2s. 3d.

THE seventh volume of the Board of Trade Earnings and Hours Inquiry dealing with conditions in the railway service during 1907 loses much of its value through being five years out of date. In the intervening years Mr. Lloyd George's Conciliation Scheme has been in force, and though it was found to be dilatory and cumbersome, and has eventually been modified in certain essentials, it undoubtedly did something to improve the conditions of service. The Board of Trade return does not, therefore, give a true picture of the railwaymen's work to-day, or even of the conditions prevailing before the strike of August, 1911. But though it would already have been out of date, the Report would have been exceedingly helpful as a guide to public opinion during the troubles of last year, when the only data on which a judgment could be founded were those put forward by one or other party to the dispute. It is exceedingly to be deplored that owing to delay in publication, the time, trouble, and money spent on investigations such as that under review should be almost entirely wasted as a means of instructing public opinion. If the Earnings and Hours Inquiry of 1906 was planned on too large a scale for the resources of the department concerned, the Board would have been better advised to split the work up and report on one industry before it began on the next. This question of the publication of statistics is a serious one, for if results only appear long after they have ceased to have any general interest, employers will naturally feel a disinclination to go to the trouble of getting out the information asked for in such elaborate inquiry

forms as those circulated in 1907 in connection with the Wages Inquiry and the Census of Production.

As regards the present report, perhaps the most interesting feature is that it corroborates in almost every detail the results of the census taken by the Amalgamated Society of Railway Servants in 1907, a report of which was published in February, 1908. According to the figures of the official report—which was very largely compiled in the Railway Clearing House—the Trade Union report slightly overstates the average rate of pay for men in the country as a whole, but that is probably accounted for by the fact that the latter, which only concerns 250,000 men as against 350,000 in the former, is chiefly deficient as regards the country districts, as to which the Trade Union branch secretaries had very little information. The A.S.R.S. report is probably the only example of so comprehensive an inquiry into the conditions of a great national industry made by a Trade Union; but the coincidence of the two sets of results clearly shows that it is possible to get accurate statistical data from such a source.

For the statistician and economist the present report is a most valuable source of information. Thanks to the concentration of railways into a few hands, the inquiry embraces practically every railway worker in the country; the results are presented so as to bring out differences of earnings in various parts of the country as well as differences between large and small towns; in every case rates of pay for a normal week are distinguished from the actual earnings, which include overtime, Sunday pay, bonuses, &c.; while as regards both sets of figures, the numbers are analysed in shilling wage groups, so that the distribution of wages is shown at a glance. In the detailed tables the distribution is shown by medians and quartiles. The only fault that can be found with the report on its technical side is that no comparison is made with the 1886 results. Such a comparison would have been exceedingly valuable and instructive, for the railway returns are probably more comprehensive and exact than any in the series of wage reports. The reasons for not doing so seem quite inadequate. In the first place, the reporter states that the grades covered are different, and in particular "the returns for 1886 and 1891 included a large group of men employed in construction works who are excluded from the 1907 returns." The Department, however, has the figures for these construction works, but has chosen to put them in Vol. VI. among Metal Engineering and Shipbuilding trades. Surely it would have been possible and quite legitimate to take the returns of railway construction works and

add them to the present figures for the purpose of comparison! Again, we are told that "where separate figures are given for specified grades, the composition of grades called by the same name in the returns furnished for 1886, 1891, and 1907 is not in all cases identical: for instance, the men dealt with separately in the present returns as porter signalmen and porter shunters were in 1886 and 1891 included with porters." But, again, this is surely only an excuse. The number of grades in which such changes have occurred is very small, and the difficulty could certainly have been got over by grouping grades and giving comparative figures for the locomotive department, traffic department, permanent way department, &c. Lastly, "while the 1907 returns gave the numbers paid at each different rate, the 1886 and 1891 returns were confined to stating the numbers paid at rates falling within certain specified limits, mainly within five-shilling groups." But the former reports also gave averages which it should be possible to compare with some of the present figures, and in any case comparison of the medians could have been made with safety, for the distribution in the critical groups is shown in the present report to be remarkably even. The Board, however, seem to have been limited in their discretion by the railway companies, who, as has already been mentioned, took a large share in compiling the figures and presented them in such a way as to prevent any comparison of the wages on different railway systems.

But though the return would have been much more valuable if it had been issued two or three years ago and had made a comparison with the figures for 1886 and 1891, it is nevertheless a document to be commended to the careful study of economists as a model of the way in which wage statistics should be presented.

W. T. LAYTON

Reports of the Standing Committee on Boy Labour in the Post Office. [First Report. 1911. Cd. 5504. 2½d. Second Report. 1912. Cd. 5755. 2½d.]

THIS small committee is doing exceedingly useful work, of a kind which must be of interest to the economist. The Post Office employs, or did employ, nearly 16,000 boys, a large proportion of whom it did not absorb into adult employment. The questions to be answered by the Committee are: (1) How may the number of boy messengers be reduced by the substitution of other kinds of labour, by greater use of appliances, and by economy of numbers through better organisation, which will

ensure that all are fully employed? (2) How may the number absorbed into the Post Office and other Government departments be increased? (3) How may opportunities of satisfactory outside employment be increased?

Already the number of messengers has been reduced from 15,790 on March 31st, 1910, to 14,506 on September 30th, 1911. The number of messengers who obtained permanent situations in the Post Office was 1,615. In their first report the Committee estimated that about 1,900 boys could be provided for each year. Owing chiefly to the transference of the telephone system to the State, the number of those who can be absorbed is now estimated at about 2,350 per year. To this number may be added 160 boys who will find employment as telegraphists, &c., in the Royal Navy and the Royal Engineers. The Committee are negotiating with the War Office regarding the special offer of a number of places in the Army Service Corps and the Royal Army Medical Corps to messengers, with a view to their later re-appointment in the Post Office. As the Committee point out, the success of the ultimate scheme really depends on the employment of the right proportion of boys at the various ages. Whereas at the beginning of 1911 there were 6,031 boys under 15, and 6,120 between 15 and 16, the numbers at higher ages were much smaller. The ultimate distribution of boys will be much more even—e.g., over 3,700 under 15½ and more than 2,000 over 18½.

It is hoped to improve the boys' chances of obtaining outside employment by means of continuation classes. There are difficulties in the way of attendance, which, however, are being more or less overcome, and a system of compulsory classes is being gradually introduced. At present attendance is obligatory on boys engaged in offices employing more than 50 boys. Of 8,237 boys at such offices, 6,405 are enrolled in special classes, the balance consisting mainly of boys over 16½ years of age, who may attend voluntarily. The classes are held either at the Post Offices or at the Evening Schools of Local Education Authorities.

The second report shows that distinct improvement has been made since the issue of the first report, and it seems probable that the evil of the "blind alley" in the Post Office will be minimised before very long.

ARTHUR GREENWOOD

Report by the Committee on Irish Finance. [Cd. 6153.] 1912.
Price 3½d.

To be reviewed.

Memoranda prepared from information in the possession of the Labour Department of the Board of Trade relating to the text and operation of certain Laws in the British Dominions and Foreign Countries affecting Strikes and Lock-outs, with especial reference to Public Utility Services. [Cd. 6081.] 1912. Price 1s. 5d.

A VERY useful collection of material, which will be the subject of a note in a future number of the Journal.

OBITUARY.—FREDERIC SEEBOHM (1833–1912).

IN Seebohm England has lost one of her most original and efficient thinkers. He had the merits as well as the defects of a self-taught man. His mind did not move along the grooves marked out by tradition and authority; without being in the least prone to take up the critical or sceptical attitude for the sake of effect, he shaped his course entirely in pursuance of his own lines of inquiry, without paying much attention to what had been done or was being done by others. Sometimes the result might prove to be a paradox, sometimes the investigator stumbled against difficulties which might have been avoided through more complete training, but often new ideas were started and the subject of investigation was illumined in a startling manner. In order to estimate the value and the shortcomings of Seebohm's work, we must recollect, to begin with, what he found in the field of social history when he began to explore it. Mediæval constitutional history had been treated with remarkable success by Stubbs: not only the growth of Parliament, but the intimate connection between local self-government and the formation of a powerful central authority, had been studied with thoroughness and great learning. Freeman and Greene had described with vivid imagination the general life of the people in the sense of an organic development proceeding from the free Germanic democracy sketched by Tacitus. A third predominant influence was supplied by Sir H. Maine as regards law; his lucid exposition of judicial ideas embodied in varying surroundings had impressed his readers with a sense of the relative character of legal notions; among other things, individual property in land was supposed to be evolved out of a state of primitive communism. On a lower level, Thorold Rogers had thrust on the public a mass of economic facts and figures, loosely held together by the view that free trade and free contract have not increased the prosperity of the working

people, and that modern civilisation appears at a disadvantage when compared with the rule of mediæval custom.

Seeböhm came primarily into conflict with this presentation of economic development. In attempting to trace the landmarks of English husbandry in connection with population and wages (*Fortnightly Review*, 1870 ff.), he was led to dissent from Thorold Rogers. As a convinced Free Trader and individualistic Liberal, he distrusted Rogers's appeals to a mediæval golden age, and when he came to examine the actual evidence he became aware that the roots of English economic history had not been discovered yet. His life and activity in Hitchin, the market centre of an agricultural district, and his great capacity for visualising economic generalities, enabled him to bring into the field of inquiry a number of concrete observations on the processes of rural life. The open-field system was revealed to Seeböhm's countrymen by his book on the English village community more than by any other work, and the three fields of Hitchin manor became the classical instance appealed to in discussions on holdings, compulsory rotation of crops, common pasture, the use of the waste, &c. Seeböhm's analysis proceeded from the known to the unknown, and the nineteenth-century banker became thoroughly familiar with the details of the Hundred Rolls, of Domesday, of Anglo-Saxon charters, and of Roman agricultural treatises.

Seeböhm was not the earliest pioneer in this domain of inquiry; Olufsen, Hansen, and Meitzen had made the study of agrarian archæology fruitful in Germany before him, and Nasse had succeeded in calling attention to some of their results in his brilliant Bonn oration of 1869. But to English readers the subject was presented by Seeböhm in a masterly way. His manner of collecting evidence was not entirely free from objections. He looked keenly for the facts suited to his argument, and often succeeded in presenting disregarded points in an entirely new and striking light. I should like to quote as an instance the way he put together the notice on the outfit of the *gebür* in the Rectitudines with the description of the services of the Glastonbury villains, or his explanation of the passages of the Welsh laws on coaration. But he was sometimes colour-blind in regard to the sides of the subject which did not fit his theories; the treatment of the term "ceorl" in Anglo-Saxon documents may serve as an example. If I may be allowed a comparison, he resembled a brilliant chess-player, fertile in expedients and concentrating his attention on his own attack, but not careful to guard his position against the

counter-attacks of adversaries. Those who practise the noble art of chess know that some of the prettiest games have been produced by players of this kind. The drawback of such a method as regards problems of learning consists, however, in the fact that discussions are not pushed to an artificial close, and an adversary worsted for a time may reappear in full armour at unexpected moments.

Seeböhm brought into the field against Thorold Rogers, not only a more scientific method and a wider knowledge of materials, but a connected scheme of social evolution, ranging from slavery through the servile drudgery of mediæval villains to the free contract of modern civilisation. In tracing this onward course of development he collided, not only with Thorold Rogers, but with the Germanistic school represented by Freeman, Greene, and Stubbs. He regarded the "masterful independence" of Teutonic freedom, and the institutional importance of the democratic township, as romantic conceptions not supported by evidence, and improbable from the outset as carrying our modern aspirations into a primitive world. In spite of the conspicuous miscarriage of Coote's attempt to deduce English civilisation from Roman antecedents, he maintained that German barbarism had merely to supply materials for institutions which had been created by Rome. The Roman *villa* became for him the standard honeycomb composed of hexagonal cells reproduced by working men of different ages in the same ever-recurring shape until the farm system and free contract destroyed the regularity of the arrangement. In conformity with Maine, he underlined this communal bond of the mediæval village, but he traced the origin of the communal bond, not to tribal freedom, but to manorial servitude. It seemed to him that free men are naturally inclined towards individual acquisition, disposition, and alienation of property; while the slave and the serf lack personality, and therefore are subjected to communalism.

It is interesting to note that Seeböhm's ideas, although suggested by his personal studies and circumstances, coincided in a remarkable way with similar constructions of Fustel de Coulanges, Knapp, and others; this shows, of course, that they formed part of a general reaction against Germanistic conceptions of a romantic type. But, like all reactions, this literary movement was bound to spend itself after a time, and to leave only part of its results to posterity as a permanent gain. I need not trace the stages by which some of Seeböhm's positions were modified and others controverted. It is important, however, to point out

briefly in what direction such a transformation became necessary. While it is admitted that Roman influence had an important bearing on the formation of the mediæval rural economy and class system, yet the elements brought in by the tribal life of Celts and Teutons cannot be disregarded, and the evolution of land tenure has to be connected somehow with the evolution of tribal ideas and tribal institutions. We need not call the latter democratic in our or in the Greek sense, but tribal warriors are free men, and there is no reason for denying to the German invaders of Britain the same sort of rude independence as may be observed among the Abor or the Berber tribesmen of our time.

Seeböhm felt the strength of such considerations, and turned his attention to the study of tribal custom in Wales and in Teutonic countries. In his book on the Tribal System in Wales he brought forward and utilised for the first time the exceedingly valuable material of the Welsh fourteenth-century surveys, and though this work did not achieve the same popular success as the *English Village Community*, it has been a most important contribution to our understanding of tribal institutions in general, and especially of the growth of agnatic kindreds. Further study on similar lines is certainly promising. Seeböhm's own attempts at constructive inference from this material were somewhat impaired by the tendency to give one-sided prominence to the personal authority of patriarchs, and to the rise of a class of serfs, while the decisive fact of the tribal arrangement appears to be the derivation of political and economic rights from the union between free kinsmen. Another drawback of the Welsh studies lay in the uncritical use of ecclesiastical documents of a very doubtful character. The book on tribal custom in Anglo-Saxon, although containing many interesting observations, stands altogether on a lower level of excellence, and does not present much that is new to students of Germanic antiquities.

Towards the close of his life Seeböhm was working with remarkable vigour and freshness of mind on problems of metrology in the widest sense of the term. He analysed the connections between superficial measures all over the domain of what may be called Mediterranean culture. Egypt, Babylonia, Greece, Italy, Celtic lands, Scythian plains, the cultural centres of ancient Germany and ancient Britain, yielded a profuse harvest of data which it required the piercing eye and the sure hand of an investigator like Seeböhm to sift and to co-ordinate on rational lines. I have often had the privilege to listen to Seeböhm's

exposition of his views on this subject, and my impression was that he had succeeded in solving a number of puzzling problems and tracing most unexpected and interesting connections between agrarian standards. Several chapters of the coming book had already been written, and it is to be hoped that the public at large may soon get access to this invaluable store of knowledge.

It is a pity that one can say so little in trying to sum up a great thinker's work. The best memoir of such a man is, after all, in his own books, and to these, fortunately, we are still able to turn.

PAUL VINOGRADOFF

NICHOLAS PAINE GILMAN.

WE regret to record the death of Professor N. P. Gilman on January 23rd, 1912. After graduating at Harvard Divinity School in 1871, Nicholas Paine Gilman at once entered the Unitarian ministry, and occupied a pastorate in New England. It was not long, however, before he became engaged in literary and academic work, of the kind with which he was to be mainly occupied throughout his life, through his appointment to the chair of English Literature in Antioch College, Ohio. In 1884 he became assistant editor of the *Unitarian Review*; from 1888 to 1896 he was editor of the *Literary World* of Boston, and from 1892 to 1900 managing editor of *The New World*, a quarterly review intended to be "hospitable to progressive scientific thought in religion, theology, and ethics considered in relation to religion." In 1895 Professor Gilman was appointed to the chair of sociology and ethics in the Meadville Theological School, and occupied it up to the time of his death.

Professor Gilman's well-known works on the relations of employers and employees (*Profit-sharing between Employer and Employee: a Study in the Evolution of the Wages System*, 1889; *A Dividend to Labour: a Study of Employers' Welfare Institutions*, 1899; *Methods of Industrial Peace*, 1904) have taken as an established position in the literature of this subject in England as they have in the United States. But perhaps the main part of the activity and conviction and clearness of thought which he devoted to the social and moral progress of the community is embodied in the innumerable reviews, addresses, and articles which he contributed to the periodical literature of his own country.

WE regret to announce the death, on May 23rd, 1912, of Mr. Thomas Kirkup, M.A., LL.D., the author of *An Inquiry into Socialism*, *History of Socialism*, *A Primer of Socialism*, and other works on economic subjects. Mr. Kirkup, who was born in 1844, was originally a pupil teacher in the village school at Kirk-Yetholm. He proceeded thence to Edinburgh University, and studied later at several foreign universities.

CURRENT TOPICS

At the date of publication of the last number of the ECONOMIC JOURNAL the coal strike of 1912 had lately commenced: at the time of going to press with this number the last negotiations for fixing district minima under the Act are nearly complete. In the September number, therefore, it will be possible to review the history of the crisis as a whole, and an attempt will be made to present an account of the main facts in a form which may possibly be useful for purposes of future reference. In the meantime, it will not be worth while to recall points of detail, and we will content ourselves with a few general comments upon what has been, perhaps, one of the most startling episodes of recent economic history. We greatly regret that on such an occasion illness should have deprived us of the services of our regular labour correspondent.

IN spite of some attempts at sensationalism on the part of newspapers, not one of the least astonishing features of the episode was the comparatively small amount of general distress and dislocation which it occasioned. If, when the strike began, it had been supposed that it would last some six or seven weeks, we should all have regarded it in anticipation as a national calamity of the first order. In the event, there was, of course, much loss, distress, and inconvenience—to an acute degree in some four or five districts; but matters were never desperate, and the vast mass of the population of the country pursued their daily tasks exactly as usual.

THE volume of exports during March and April (if we exclude coal itself) was actually increased. The Board of Trade index for unemployment rose sharply from 2·8 per cent. at the end of February to 11·3 per cent. at the end of March, when matters were at their worst (falling to 3·6 per cent. by the end of April); but the figures were not sensational if we compare them with

those which have persisted for much longer periods at times of industrial depression--during the first four months of 1909, for example, the percentage of unemployment never fell so low as 8 per cent., and the average unemployment over the two months March and April in 1909 was more serious than in the corresponding months of 1912. The figures for pauperism in March (one day in the second week) were actually lower than in February, 1912, or in March, 1911; and in April (one day in the second week) they were only 13 per 10,000 of population higher than in the preceding year, a considerable part of the increase being due to the districts of Stockton-on-Tees, Birmingham, Wigan, and North Staffordshire. In fact, comparatively few districts and comparatively few industries were *acutely* affected. The pottery trade in North Staffordshire was the first to be touched, and by the third week of March work was almost at a standstill. In the pig-iron industry two-thirds of the blast furnaces were stopped by the second week of the strike, and at the end of March only 13 per cent. were still working. The manufacture of iron, steel, bricks, and glass was affected not to so great an extent; but, nevertheless, seriously. On the other hand, up to the end of March the textile trades were but slightly touched, and in some districts of Lancashire employment was *improving* up to March 23rd. In the building and shipbuilding industries employment was actually better on the last day of March than on the same date of the preceding year.

THE comparative ease with which the country as a whole passed through so unprecedented a situation was, no doubt, due in large measure to the ample warning of what might be coming which the coalminers had given. Large stocks of coal had been accumulated wherever it was possible, and these stocks were carefully husbanded from the outset. Except in the case of the railways, where great public inconvenience was caused by a restriction of services which some good judges have held to have been excessive, there were few instances in which providers of "public utilities" reduced facilities to such an extent as to cause real trouble; and many of them found themselves at the end of the strike with ample supplies still in hand. With regard to the use of coal for domestic purposes, the weather was, fortunately, such as to render economy in the use of it much less of a privation than might easily have been the case.

BUT if we turn from the immediate past to the future and pay attention to what the coal strike might have been rather than

to what it was, there seems far more occasion for alarmed or anxious sentiment. Next time there will be no warning. The workers have learnt their strength, and some sections of them will not be slow to use it. It is now evident for the first time that the degree of union within each section of the men has reached such a point that they can take full advantage of the intricacy and interconnection of modern economic organisation, and that a single section of them can hope to force the community to terms by stopping the working of the whole machine. Problems, not altogether new to the economist, of which statesmen and officials are now hurriedly asked for the solution, have come with startling rapidity—as is apt to be the case—into the sphere of practical politics.

We have now to make up our minds what limitations of kind and degree ought to be placed upon the right to strike and upon the unfettered freedom of trade unions, in those cases in which a quarrel between masters and men involves the whole community in its consequences.¹ Fortunately, these cases are not nearly co-extensive with the whole of industry—the public utilities of light, water and drainage, transport, the supply of power, and the supply of food fairly include them. Recent experience seems to make it probable that restrictions upon the right to strike will have to be accompanied by the State regulation of wages, hours, and other conditions of employment in the industries affected, of a much more far-reaching kind than it has been orthodox hitherto to advocate. The coal strike of 1912 probably marks the decay and abandonment of the policy of *laissez-faire* in one more department of State action, and a further advance in a direction which we may or may not choose to call Socialistic.

THE strike has served to bring the fact into prominence that it is a very partial view to regard such struggles as between Capital on the one hand and Labour on the other. They may be, in at least as great a degree, between the single section of those who provide some commodity and the rest of the community who consume it. Sir Hugh Bell endeavoured to demonstrate in letters to *The Times* newspaper that a very moderate percentage increase to the wages bill would quickly ruin the mine-owners—an increase of 10 per cent. on the wages bill annihilating

¹ Attention may be called to the very useful volume of memoranda dealing with the experience of the colonies and foreign countries in this matter, which has been issued by the Board of Trade and which is referred to on p. 338 above.

profits. But he seemed to base his argument on the hypothesis that the price of coal is permanently fixed at the rather low level of 1911. It followed equally from his figures that a 10 per cent. increase of price would treble profits. We are also told that of the total output of coal an appreciable part is produced near the margin of profitableness. These are conditions which make it peculiarly easy to shift on to the consumer an increased cost of production which affects all coal-getting with approximate equality—even when due allowance is made for the circumstances of foreign trade. And if it is likely that no small part of the *ultimate* burden, which the new *minima* may involve, will fall on the community generally, it seems certain that the *immediate* loss was mainly borne by it. For it is widely recognised that the direct consequences of the strike to the owners have not been serious. Coal is a commodity in which with the greatest ease a temporary rise of price can more than make up for a temporary fall of output. The *Morning Post* has quoted the case of a colliery which seems to have made a profit of nearly a quarter of a million by selling coal at inflated prices from a stock of 200,000 tons behind the colliery; and there were other cases of mines with large reserves of coal to sell. At no stage of the dispute did the Stock Exchange take a gloomy view of the value of colliery shares. Indeed, it seemed possible that the masters had little to lose even from a further prolongation of the strike. The difficulty, which the Government found in bringing it to an end, essentially lay in the fact that an immediate settlement was of so much more urgent importance to the country as a whole than to either of the parties to the dispute.

It is a fundamental disadvantage of strikes—apart from their direct wastefulness—as a means for the improvement of the distribution of wealth, that their effect will be mainly restricted to the well-organised trades, that these trades are likely to be amongst those which are already relatively well paid, and that the benefit which thus accrues to them may be at the expense, in some part, of workers in other industries who are, regarded impartially, more deserving. Apart from remote results, it was clear in this instance that important sections of the working classes were suffering, in some cases severely, from events which could not possibly turn out to their advantage. Socialists were fully alive to this aspect of events, and the Labour Party were in difficulties throughout as to their right policy in circumstances in which it was singularly difficult to determine where the advan-

tage of the working classes, considered as a whole, really lay. For the first time the division was deeply drawn between them and the new Syndicalists who frankly adopt sectional weapons, whether or not such policy coincides with class warfare, as a satisfactory instrument for the promotion of ultimate good.

THE term *Syndicalist* has sprung into common use in this country more quickly than the conception to which it properly corresponds. It seems likely, therefore, that it will be used for some time at least rather as a term of vulgar abuse than as a scientific description. How many terms in historical succession have been thus applied! In future to be known as a Socialist will be almost respectable. Those whose economic opinions we wish to characterise as outrageous, we shall now call Syndicalists. If we restrict the term *Syndicalism* to its original sense of a policy aiming at the ownership of the means of production in each trade by a union of the workers in that trade, it seems doubtful how far more than a very small minority even amongst the men's leaders have been seriously influenced by any such ideas. If we take it in its secondary sense of the advocacy of "direct" as opposed to parliamentary action for the furtherance of the workers' aims, and in particular of the "general" strike, its relevance to recent events is very incomplete; for there was no "general" strike, and no attempt at one. So far as the current use of the term in England has any clear meaning at all, it seems to have obtained a third derivative sense for any strike policy which aims at forcing the Government to intervene by making it a first object to cause acute injury to the community, the old-fashioned object of hitting the masters being relegated to a subsidiary place. The "irritation strike," which has found some journalistic advocates in South Wales, is the nearest to original Syndicalism that we know in England. Yet even in this case it seems to be a primary object to force the hands of the Government. If in this country we are to use the term Syndicalism quite generally for any strike policy which primarily aims at forcing Government intervention, it has travelled very far from its Continental parent; and endless misunderstandings are likely to arise as to the kind of ultimate intention which we intend to impute when we apply it. It is interesting to note, by the way, that the "conservative" and "revolutionary" cures for social disorder, co-partnership and Syndicalism (in its original sense) respectively, are not altogether dissimilar, and agree in differing from Socialism, as regards the idea from which they set out,

namely, an association of interests between the workers and the management in each particular industry. Who knows but what the Syndicalist may contribute, after all, a useful and fundamental idea to the store out of which Socialists, proletarians, those who love liberty, and those who think first of economic efficiency, are to evolve the social order of the future.

FRESH proof of the widespread tendency to a rise in the cost of living is derived from the course of Spanish prices. This evidence has been collected by Professor Francisco Bernis, of the University of Salamanca, in an essay entitled *El Problema de las Subsistencias* (printed by A. de Allende, at Begoña, in Bilbao, 1911). A secondary title purports that the special object of the inquiry is State action for the purpose of reducing the cost of living in the interest of the less-favoured classes. One kind of State action is suggested by the limited range of the statistics adduced. If the inquiry had been conducted by a Government office, a greater number of prices and more exact information as to the interest of the consumer in their variations might have been obtained. The author, however, has made the best use of his limited data. He arranges the commodities about which he has been able by his unaided efforts to obtain adequate information in four groups, namely, (1) wheat, potatoes, and bread; (2) rice, chick-peas, and kidney beans; (3) beef, mutton, pork, and ling; (4) sugar, coffee, and salt. Having regard to the expenditure of the working classes, he assigns to these four groups the respective weights 30, 30, 20, 10. He thence calculates a series of index numbers referred to the year 1901 as base, from 1891 to 1908 inclusive. We reproduce the latter part of the series:—

		1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.
Weighted	...	100	101·5	102·3	108·0	108·8	106·0	101·5	102·6
Unweighted	...	100	101·8	101·7	107·2	107·4	104·2	101·9	102·4

A slightly different series of Spanish index numbers, constructed for the purpose of comparison with foreign statistics, shows higher figures (as compared with the above) for 1907 and 1908. Variations of price with respect to *place*, as well as time, are examined by Professor Bernis. Thus, for several commodities he finds that the prices are higher in the large towns and small villages of Spain than for populations of intermediate size. He is not one of those index-makers who—to reverse the adage—cannot see the trees for the wood. Rather, the purpose of his essay leads him to inquire into the special circumstances of each commodity. For instance, he finds that the price of wheat in Spain

as compared with other countries is sensibly raised by the system of Protection that prevails in Spain. He recommends the reduction, but not the entire abolition, of that system. The suggestions which he makes as to the action of Government for the benefit of the less-favoured classes—the establishment of Consumers' and of Producers' Co-operation, the publication of prices and other information of the kind which is furnished by the *Commissioner of Corporations* in the United States—these and many other recommendations strike us as sagacious and suited to the condition of the country. The author seems to be adept in what Burke calls "the finest problem of legislation," to determine what should be done by Government for the people, and what people should be left to do for themselves.

THE recent lock-out in the metal industry in Bohemia (writes a correspondent) ended with a new agreement as to wages and hours, and in view of our own Coal Mines (Minimum Wage) Act the details of the Bohemian settlement are interesting. The normal working hours have been fixed at 54 per week. As for wages, the skilled workman will receive about 3¼d. an hour, but from July 1st, 1913, the scale will be from 3¼d. to 3¾d. an hour. In Prague an assistant foundry-man is to have 3¾d. an hour, while in the country only 3½d. All overtime is to be paid for; so is Sunday labour. The agreement is binding up to December 31st, 1915, and after that renewable annually.

THE *Société d'Economie Politique* of Paris celebrated, on May 30th, at the Sorbonne, the seventieth anniversary of its foundation and the ninetieth anniversary of the birth of its President, M. Frédéric Passy, numerous foreign societies being represented.

AT the Fifth International Congress of Mathematicians, to be held at Cambridge from August 22nd to 28th, there will be a section on *Statistical, Economic, and Actuarial Mathematics*, for which Professor Edgeworth and Professor Bowley are acting as introducers. For all information in regard to the Congress, application should be made to Professor E. W. Hobson, Christ's College, Cambridge.

THE officers of the American Economic Association have recently presented their annual report for 1911—the first since the inauguration of the *American Economic Review* last year. The number of members and subscribers has risen very rapidly from

1,030 in 1908 to the large total of 2,400 in 1911. The expense of the new journal, however, has made it necessary to raise the annual membership fee from \$3 to \$5, and to increase the life membership fee to \$100. Professor Fetter, of Princetown University, has been elected President of the Association for 1912.

PROFESSOR W. Z. RIPLEY has been appointed Nathaniel Ropes Professor of Political Economy at Harvard University.

MR. C. R. FAY, Fellow of Christ's College, Cambridge, has been appointed Gilbey University lecturer on the History and Economics of Agriculture.

THE University of Cambridge have lately created a University lectureship in Statistics, to which Mr. G. Udny Yule has been appointed.

APPOINTMENTS are about to be made at the present time to two English chairs of Economics—at Armstrong College, Newcastle-upon-Tyne, where a professorship has been founded in memory of Sir David Dale, and at University College, Nottingham.

RESEARCH studentships in economics are being offered by the London School of Economics, by Woodbrooke Settlement, Birmingham, and by Gonville and Caius College, Cambridge.

RECENT PERIODICALS AND NEW BOOKS.

The Economic Review.

- APRIL, 1912. *Small Holdings and Land Banks.* H. W. WOLFF.
Some Thoughts on Tariff Reform. J. H. GUBBINS. In support
of Tariff Reform. *The Public Debt of India.* D. A. BARKER.
An historical account of the principles on which the Government
has acted from time to time in building up the debt. *Public
Opinion and War.* NORMAN WHATLEY. With reference to Mr.
Angell's writings. *Statistics and the Theory of Money.* W. J.
ASHLEY. Professor Ashley criticises the "statistical verifica-
tion" of the Quantity Theory of Money, which Professor Irving
Fisher has attempted in his recent book, on the ground that the
equation which the latter "verifies" is an *identity*, and that
the verification proves nothing, therefore, as to the relation of
cause and effect.

The Statistical Journal.

- MARCH, 1912. *The Rate of Interest Since 1844.* R. A. MACDONALD.
The Rate of Discount and the Price of Consols. T. T. WILLIAMS.
Prices of Commodities in 1911. A. SAUERBECK.
APRIL, 1912. *The Financial Systems of Germany.* PERCY ASHLEY.
An admirably comprehensive account of the existing tax-system.
Some Researches Concerning the Factors of Mortality. LUCIEN
MARCH. *The Relation between Large Families, Poverty,
Irregularity of Earnings and Crowding.* STEWART JOHNSON.
MAY, 1912. *On the Methods of Measuring Association between Two
Attributes* (64 pp.). G. UDN YULE. An elaborate contribution
of the utmost importance to the theory of Correlation. *The
Rate of Discount and the Price of Consols.* T. T. WILLIAMS. A
reply to the discussion on Mr. Williams' paper printed in March.

Journal of the Institute of Bankers.

- FEBRUARY, 1912. *The Influence of Banking on International Rela-
tions.* NORMAN ANGELL. An interesting and important supple-
ment to Mr. Angell's *The Great Illusion*. His ideas received
considerable support from the bankers present on the occasion
of his reading this paper to the Institute.
MARCH, 1912. *The South Sea Bubble.* MABERLY PHILLIPS. With
numerous extracts and illustrations.

Bankers' Magazine.

MARCH, 1912. *Canada's Growth and the Need for Revision of its Bank Act.* F. W. FIELD. The Bank Act comes up for revision shortly. *Second Gilbert Lecture.* SIR JOHN PAGET. The proper use of the term "to discount" (which of the two parties, when a bill changes hands, can be said to "discount" it) is discussed, and several points connected with crossed cheques are dealt with. This issue contains a large number of the most important bank reports of the year.

APRIL, 1912. *Progress of Banking in the United Kingdom during 1911, III.—Balance Sheets. Savings Bank Statistics, II.* A. H. GIBSON. Mr. Gibson endeavours to establish the empirical law that "the number of depositors possessing a certain balance is proportional to the reciprocal of that balance." This article is continued in the May number.

MAY, 1912. *Progress of Banking in the United Kingdom during 1911, IV.—Proportion of Cash to Deposits.* Contains numerous tables useful in connection with the question of gold reserves. *Canadian Banking in 1911.*

Clare Market Review.

MAY, 1912. *The Industrial Revolution and the Middle Classes.* M. C. BUER. *Less Known Branches of the British Library of Political Science. III.—The Henry Hunt Hutchinson Collection, For and Against Socialism.* B. M. HEADICAR. This collection now comprises about 6,000 books and pamphlets.

The Socialist Review (Manchester).

MAY, 1912. *The Impossibility of Syndicalism.* T. JAMES FISHER. Mr. Fisher points out in detail the variety of workers, often with conflicting interests and belonging to different Trade Unions, that is to be found within a single factory. *The German Socialist Victory: Its Significance and Its Tasks.* EDUARD BERNSTEIN. Translated from the *Sozialistische Monatshefte.* *The Lessons of the Strike.* J. KEIR HARDIE. *Municipal Socialism and the Rates.* C. E. SMITH. Mr. Smith, who is one of the Elective Auditors of Birmingham, would like to see the rates fixed, and expenditure beyond their yield at this fixed rate defrayed by a local income tax.

The Russian Review.

JANUARY, 1912. The first number of a new quarterly published by the School of Russian Studies in the University of Liverpool. *The Reform of Local Finance in Russia.* A. SHINGAREV. *The New Land Settlement in Russia.* BERNARD PASS. On the same subject as Professor Tschuprow's article in this number of the ECONOMIC JOURNAL. *Recent Financial and Trade Policy of Russia.* W. HÖFFDING.

Quarterly Journal of Economics (Harvard).

- MAY, 1912. *The Regulation of Railway Rates under the Fourteenth Amendment.* FRANCIS J. SWAYZE. *National and District Systems of Collective Bargaining in the United States.* GEORGE E. BARNETT. *The Powder Trust, 1872-1912.* WILLIAM S. STEVENS. *Taxation in China.* E. T. WILLIAMS. A useful and informing article by a member of the American Legation in Peking.

The American Economic Review (Boston).

- MARCH, 1912. *Wage Boards in England.* E. F. WISE. An account of the Boards set up under the Trade Boards Act, 1909. *The Legal Minimum Wage in the United States.* A. N. HOLCOMBE. *Profit on National Bank Notes.* SPURGEON BELL. A rather confused discussion of the question of how far banks can lend their deposits, and other allied topics.
- MARCH, 1912, *Supplement.* *Papers and Proceedings of the Twenty-fourth Annual Meeting.* *Economic Investigations as a Basis for Tariff Legislation.* H. C. EMERY and H. P. WILLIS. A defence by the former, who is chairman of the Tariff Board, and a criticism by the latter, of the policy of basing tariffs on a comparison of the money costs of production at home and abroad. *The Restriction of Immigration.* H. P. FAIRCHILD. *The Significance of Emigration.* W. W. HUSBAND. The Secretary of the Immigration Commission deals more especially in this article with the emigration from the United States to Canada. *An International Commission on the Cost of Living.* IRVING FISHER. *Recent Investigations on the Cost of Living.* H. J. HARRIS. With references to the principal documents.

Political Science Quarterly (New York).

- MARCH, 1912. *State Taxation of Interstate Commerce, II.* H. J. DAVENPORT. *Marxism versus Socialism, VI.* V. G. SMIKHOVITCH. A further instalment of a study, parts of which have been appearing at intervals since 1908.

Annals of American Academy (Philadelphia).

- MARCH, 1912. *Rural, Industrial, and Social Problems.* A series of papers dealing with the rural problem in the United States.
- MAY, 1912. *Efficiency in City Government.* A series of papers dealing with (1) Need for Efficiency in Municipal Government; (2) Efficiency Principles Applied; (3) Bureaus of Municipal Research; and (4) Training for Municipal Efficiency.

The Journal of Political Economy (Chicago).

- MARCH, 1912. *Grain Legislation Affecting Western Canada.* D. A. MACGIBBON.

- APRIL, 1912. *Industrial Combination—Existing Law and Suggested Legislation.* ROBERT L. RAYMOND. *Trust Regulation and the Courts.* HARRISON S. SMALLY. *Economic Aspect of the Recent Decisions of the United States Supreme Court on Trusts.* JEREMIAH W. JENKS. *The Economics of Combination.* E. S. MEADE. *The Character and Powers of Governmental Regulation Machinery.* C. C. BATCHELDER. All these papers on the relation of Trusts to the Law were read before the Western Economic Society in March, 1912.
- MAY, 1912. *Railway Discrimination.* SAMUEL O. DUNN. Chiefly relates to the powers and decisions of the Interstate Commerce Commission. *Enforcement Provisions of the Sherman Law.* ERNST FREUND. Deals with the Federal Anti-Trust Act. *Costs and the Tariff Board.* L. D. H. WELD. A defence of the Board in reply to an article in an earlier number by Professor H. P. Willis.

Bulletin of the Bureau of Labour (Washington).

- JULY, 1911. *Industrial Lead Poisoning, with Descriptions of Lead Processes in Certain Industries in Great Britain and the Western States of Europe.* SIR THOMAS OLIVER. *White-lead Industry in the United States.* ALICE HAMILTON.
- SEPTEMBER, 1911. *Working Hours, Earnings, and Duration of Employment of Women Workers in Selected Industries of Maryland and of California.* MARIE L. OBENAUER.

Journal des Economistes (Paris).

- MARCH, 1912. *La Grève des mineurs dans la Grande-Bretagne.* YVES GUYOT. *L'Ecole autrichienne d'économie politique.* FEILBOGEN. This is the fifth of a series of articles on the Austrian School and deals with Boehm-Bawerk. The sixth and seventh in the issues of April and May, 1912, deal with Wieser.
- APRIL, 1912. *Le Minimum de salaire des mineurs britanniques.* YVES GUYOT. In the main a summary of recent events for French readers. *La Reichsbank et la Crise d'automne.* A RAFFALOVICH. *Le Dossier de l'Etat industriel: L'Etat transporteur.* DANIEL BELLET. M. Bellet presents a selection of examples from the recent history of French railways in support of his favourite thesis of the disastrous results of State intervention. "C'est certes pour nous," he concludes, "une amère satisfaction de voir les prévisions des économistes si amplement justifiées."
- MAY, 1912. *Le Budget de 1913.* YVES GUYOT. *La "Gazette de Francfort."* RAPHAËL-GEORGES-LÉVY. A history of the newspaper.

Revue d'Economie Politique (Paris).

- MARCH-APRIL, 1912. *Le Matérialisme et l'Economie Politique.* C. GIDE. *La Question agraire en Italie.* G. BOURGIN. *La Concentration commerciale sans grands magasins.* P. GEMAHLING.

L'Economiste Français (Paris).

MARCH 2, 1912. *Le crédit au petit et au moyen commerce, à la moyenne et petite industrie.* E. PAYEN. An official Commission was set up in May, 1911, to inquire into the banking organisation of France from the point of view of the credit facilities it affords to small traders. The Commission broke up into three sub-Commissions, and one of these has now reported. The above article gives some account of its proceedings.

MARCH 9 AND 16, 1912. *Les grèves gigantesques et les interventions du Gouvernement et du Parlement: les grèves des mineurs anglais et des mineurs allemands.* PAUL LEROY-BEAULIEU.

MAY 4, 11, AND 18, 1912. *Le réveil de l'impôt personnel et alobal sur le revenu.* PAUL LEROY-BEAULIEU. Three articles.

Revue Economique Internationale (Brussels).

FEBRUARY, 1912. Six articles by various writers on the Rubber Industry.

MARCH, 1912. *La Crise des Industries libre-échangistes, la Prospérité des Industries protectionnistes de la Grande-Bretagne, 1905-1911.* JACQUES BARDOUX. Professor Bardoux selects as examples of industries, which have supported a policy of Free Trade, those of coal, cotton, and shipping, and of industries, which have asked for Protection, those of chemical products, wool, and iron and steel. He argues that those in the latter category have profited more from the revivals of recent years than have those in the former. But he lays stress on the instability of Great Britain's economic system. "L'organisme économique du Royaume-Uni," he concludes, "est un des chefs-d'œuvre de l'ingéniosité humaine . . . La nation britannique a bâti là, progressivement, inconsciemment, une œuvre qui, malgré les scories et les fumées, est aussi belle que les créations de l'art. . . . Mais, d'autre part, cet organisme trouve dans sa perfection et dans sa complexité mêmes un péril croissant. Les moindres événements du dehors et du dedans exercent sur cet organisme une profonde répercussion. Doublement tributaire de l'étranger, il est à la merci d'une imprudence humaine ou d'un événement naturel. Il est impossible, sans un frisson d'inquiétude, de songer à la fragilité de cet admirable bibelot." *L'Etat réel des Finances japonaises.* KOTARO MOCHIZUKY. *La Vie chère et l'Agriculture française.* M. LAIR. *Le Développement futur des centrales génératrices l'Electricité.* HENRI MARCHAND.

APRIL, 1912. *Le Chemin de fer de Bagdad.* F. DUBIEF. *Le Port de Londres.* DOUGLAS OWEN. *L'Esprit Protectionniste.* YVES GUYOT. *Les problèmes actuels de la Colonisation allemande.* PROF. RAETHGEN.

Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft (Leipzig).

PART I, 1912. *Die agrare Neugestaltung Russlands.* F. v. WRANGELL. On the same subject as Professor Tschuprow's

article in this number of the *Economic Journal*, and in some important respects supplementary to it. With two very interesting plans of a typical village. *Die Wandlungen im charakter der Matrikularbeiträge*. LOUIS KATZENSTEIN. A contribution to the study of German federal finance. *Stundungsämter*. MARTIN BÜRCEL. *Das Münzwesen des Deutschen Reichs von 1500 bis 1566*. II. FREIHERR VON SCHRÖTTER. *Die Bank von Italien*. J. SCHEFFLER. *Die Reichzuwachsteuer von Sozialpolitischen Gesichtspunkten*. M. WEYERMANN. *Der Staat und des Genossenschaftswesen*. H. CRÜGER. *Zeitfragen im ländlichen Genossenschaftswesen*. L. WEGENER.

Jahrbücher für Nationalökonomie (Jena).

MARCH, 1912. Bruno Hildebrand. HANS GEHRIG. "Gedenkworte" occasioned by the centenary of the birth of the original founder of the *Jahrbücher*. *Grundlagen einer ökonomischen Produktivitätstheorie* (55 pp.). ROBERT LIEFMANN. Professor Liefmann's articles, here and in recent issues of the *Archiv für Sozialwissenschaft*, comprise matter which amounts in bulk and character to little less than a treatise on the fundamentals of economic theory. *Die Idee der Einkommensteuer in Frankreich*. H. L. RUDLOFF.

Archiv für exakte Wirtschaftsforschung (Jena).

PART I., 1912. *Zur gegenwärtigen Krisis in der deutschen Wirtschaftswissenschaft*. "Privatwirtschaftliche Untersuchungen." RICHARD EHRENBURG. Two controversial articles on method amongst German economists, in the first of which Professor Ehrenberg contends that, if men differing so vitally from one another as Sombart, Pohle, and himself all agree in sharply criticising the present state of political economy in Germany, it is no exaggeration to describe the subject as being at the moment in a state of crisis; and in the second of which he replies in detail to some brief remarks inserted by Schmoller in the new edition of the *Handwörterbuch der Staatswissenschaften*. *Statistische Untersuchungen der Futterbau- und Kapitalausnutzung durch Nutztierhaltung in verschiedenen Gebieten Deutschlands*. F. WATERSTRAUT. *Der Einfluss der Verkehrslage auf Intensität und Rentabilität landwirtschaftlicher Betriebe*. B. SAGAWÉ.

Archiv für Sozialwissenschaft (Tübingen).

PART II., 1912. *Das Berufsschicksal der Industriearbeiter*. PROF. A. WEBER. *Die Entstehung des Preises aus Subjektiven Wertschätzungen*. (64 pp.) PROF. R. LIEFMANN. The concluding portion of this lengthy article, noticed in the March number of the *Economic Journal*. *Beiträge zur Literaturgeschichte des steuerfreien Existenzminimums*. PROF. W. LOTZ. *Die Aufgaben der Sozialpolitik in der Steuergesetzgebung*. DR. E. H. VOGEL.

Zeitschrift für Volkswirtschaft, Sozialpolitik und Verwaltung
(Vienna).

- PART II., 1912. *Die neuere Gesetzgebung über die Heimarbeit unter besonderer Berücksichtigung des österreichischen Regierungsentwurfes.* E. CRONBACH. *Die Altersversicherung der Arbeiter in Belgien und das System der unterstützten Freiheit.* PROF. E. MAHAIM. *Das französische gesetz über die Altersversicherung der Arbeiter.* PROF. C. GIDE. *Oesterreichische Staatsbahnverwaltung.* R. VIKTOR.

Finanz-Archiv (Stuttgart).

- PART I., 1912. *Zur Entwicklungsgeschichte der Formen und der Organisation des öffentlichen Kredites* (70 pp.) PROF. JULIUS LANDMANN. From the Middle Ages down to the nineteenth century; much documented. There are also articles in this issue of the *Finanz-Archiv* on some part of the taxation or finance of Wurtemberg, Hesse, Roumania, and Russia.

Scientia (Bologna).

- MAY, 1912. *Judaismus und Kapitalismus.* W. SOMBART. Professor Sombart replies briefly to some criticisms on his recent book, and points out some misapprehensions to which it has given rise.

Giornale degli Economisti (Rome).

- JANUARY, 1912. *Il monopolio delle Assicurazioni.* G. MORTARA. With reference to the proposed insurance monopoly, the Italian mortality table for males published in 1902 is examined and found to be fairly accurate.
- FEBRUARY, 1912. *Il monopolio delle Assicurazioni.* G. MORTARA. The Italian table is available for the purpose of insurance. *Relazioni fra entrata e Consumo.* G. DEL VECCHIO. A study on Family budgets. *L'incidenza e la traslazione delle imposte sulle rendite.* B. GRIZIOTTI. A sequel to articles in the *Giornale* of 1910.

La Riforma Sociale (Turin).

- MARCH, 1912. *Trivellatori della Tripolitania.* I. EINAUDI. The iron manufacturers who demand preference for Italian goods in Tripoli deserve the epithet which the author has affixed to Protectionists, "borers" (of useless holes in the ground).
- APRIL, 1912. *Pro doctrina Meâ.* ACHILLE LORIA. The theory of "reddito" is defended against numerous critics. *La grande illusione d'oggi.* NORMAN ANGELL. A resumé of a well known English book by the author.

NEW BOOKS.

English.

AIYAR (M. R. SUNDARAM). *The Sterling Debt of India*. Madras; Law Printing House. 1912. Pp. 28. 6d. net.

[A very useful account, of the history of the Public debt of India and of the principles with regard to it which have been followed by the Government in the past, leading up to an advocacy of the policy of raising in India itself as large a part as possible of the capital funds required for productive expenditure.]

ASHLEY (W. J.). *The Rise in Prices and the Cost of Living*. An Inquiry into its extent and causes. London: *Evening News* Office. 1912. 1d.

[Reprinted with some additions from the *Evening News*.]

ASHLEY (W. J.). *Gold and Prices*. Six articles. London: *Pall Mall Gazette*. March 21, 22, 25, 26, 28, and 29, 1912.

[Professor Ashley has followed up his series of articles in the *Evening News*, to the reprint of which reference is made above, by a further attempt to write on a topic, which is very prominent in the public mind, in a manner which shall be at the same time popular and scientific; and he has again achieved a remarkable success. He discusses both the facts of the case and the underlying theory of precisely *how* gold comes to affect prices in a way, which, from the economic standpoint, is far superior to the account to be found in most text-books on Money, and is yet not out of place in an evening paper. The six articles deal successively with Index Numbers and Wholesale Prices, Retail Food and Finished Goods, the Cause, the Operation of the New Gold, Social Effects, and Future Prospects. It is to be hoped that they will be reprinted.]

BELL (H. T. MONTAGUE) and WOODHEAD (H. G. W.). *The China Year-Book*. London: Routledge. 1912. Pp. xxxvi + 463. 10s. net.

[This annual volume, which appears this year for the first time, contains a large amount of information and of statistics, not easily available elsewhere. Several of the chapters are of much economic interest, the most important being those on *Trade Statistics*, on *Communications*, and on *Finance*. The volume should prove very valuable as a work of reference. Account being taken of the difficulty of compiling statistics for the Chinese Empire, the information here set forth is unexpectedly detailed.]

CORNAH (J. R.). *Simple Economics for Indian Schools and Colleges*. London and Bombay: Longmans. 1912. Pp. viii + 118. 2s.

[An elementary primer, "which has grown out of notes used in teaching elementary economics to the Sixth Form in the Aitchison Chiefs' College, Lahore," intended for Indian schoolboys and, possibly, Indian students of the first and second year's standing in Colleges. Part I. (38 pp.) deals with the general theory, which is applied to Indian conditions in Part II.]

DIBBLEE (GEORGE BINNEY). *The Laws of Supply and Demand: with special reference to their Influence on Over-production and Unemployment*. London: Constable. 1912. Pp. xxiv + 289. 7s. 6d. net.

[To be reviewed.]

HERBERT (HON. AUBERON) and LEVY (J. H.). *Taxation and Anarchism*. A Discussion. London: Personal Rights Association. 1912. Pp. ix + 67. 1s. net.

[The late Mr. Auberon Herbert supports the principle of "voluntary taxation," and in alternate chapters Mr. Levy debates with him.]

INNES (ARTHUR D.). *England's Industrial Development. An Historical Survey of Commerce and Industry.* London: Rivington. 1912. Pp. xvi + 374. 5s. net.

JACK (A. FINGLAND). *An Introduction to the History of Life Assurance.* London: P. S. King. 1912. Pp. x + 263.

[The greater part of the book is taken up by a consideration of Guilds and the extent to which they undertook the service of Assurance. Mr. Jack has been Gartside Research Scholar at Manchester, and has lately been resident as an Advanced Student at Cambridge.]

KEATINGE (G.). *Rural Economy in the Bombay Deccan.* London: Longmans. 1912. Pp. xxii + 212. 4s. 6d. net.

[Reviewed above.]

KELTIE (J. SCOTT). *The Statesman's Year-Book: Statistical and Historical Annual of the States of the World for the Year 1912.* London: Macmillan. 1912. Pp. lxxxiii + 1428. 10s. 6d. net.

[Forty-ninth issue.]

LATIFI (A.). *The Industrial Punjab.* (Published for the Punjab Government.) Bombay and London: Longmans. 1911. Pp. xxvii + 304. 4s. 6d.

[Reviewed above.]

LEAKE (P. D.). *Depreciation and Wasting Assets.* London: H. Good and Son. 1912. Pp. xi + 195.

[Reviewed above.]

LOBAN (G. TAYLOR). *Some Principles in the Valuation of Land and Buildings.* London: Surveyors' Institution. 1912. Pp. 50.

[*Transactions of the Surveyors' Institution*, Vol. xliv. Part x.]

McILRAITH (JAMES W.). *The Course of Prices in New Zealand: an Inquiry into the nature and causes of the variations in the standard of value in New Zealand. With an Introduction by Professor Hight.* New Zealand: Government Printing Office, Wellington. 1911. Pp. 112.

[To be reviewed.]

MONEY (L. G. CHIOZZA). *Insurance versus Poverty.* London: Methuen. 1912. Pp. xxiii + 396. 5s. net.

[With an introduction by Mr. Lloyd George.]

PAPWORTH (L. WATT) and ZIMMERN (DOROTHY M.). *Clothing and Textile Trades: Summary Tables. With a preface by Sir Athelstane Baines, and an introduction by B. L. Hutchins.* London: Women's Industrial Council. 1912. Pp. 32. 2d.

[A most interesting and important compilation from material supplied by three publications of the Board of Trade—the Census of Production (1907), the Earnings and Hours Enquiry (1906), and the Returns of Persons Employed (1907). The industries, dealt with by the pamphlet, employed 37 per cent. of the women and girls of the United Kingdom returned at the Census of 1901 as engaged in occupations.]

PRATT (E. A.). *Inland Transport and Communication in England.* London: Kegan Paul. 1912. Pp. xii + 532. 6s. net.

[The first of a new series of volumes, under the editorship of Mr. Henry Higgs, dealing with "National Industries." Reviewed above. Further volumes are

announced on *Banking and the Money Market*, by Professor H. O. Meredith; *The Building Trades*, by Mr. A. D. Webb; *Shipping*, by Mr. C. J. Hamilton; and *The Coal Trade*, by Mr. H. Stanley Jevons.]

ROBINSON (F. P.). *The Trade of the East India Company from 1709 to 1813. (The Le Bas Prize Essay, 1911.)* Cambridge: The University Press. 1912. Pp. vii + 186. 3s. 6d. net.

[To be reviewed.]

URWICK (PROF. E. J.). *A Philosophy of Social Progress.* London: Methuen. 1912. Pp. xii + 300. 6s.

[Professor Urwick states in his preface that he has two principal aims, first, to show that "what is known as the sociological point of view is of real value, not only to students of social problems and social conditions, but to all citizens who are interested in the life and the complexities and the changes of their society"; and, secondly, to express "a very marked antagonism to 'the current conception of a general sociology, or science of social phenomena.'"]

WILLIAMS (R.). *The Liverpool Docks Problem.* Liverpool: The Northern Publishing Co. 1912. Pp. 44 + diagrams. 6d.

[Read before the Liverpool Economic and Statistical Society by the Divisional Officer for the North-Western Division of the Labour Exchanges. Reviewed above.]

WISE (E. F.). *Wage Boards in England.* London: G. Allen. 1912. Pp. 20. 3d. net.

[Reprinted from the *American Economic Review* for March 1912.]

American.

Conference on Scientific Management. *Addresses and Discussions at Dartmouth College Conference, October, 1911.* Hanover (N.H., U.S.A.): Amos Tuck School of Administration and Finance. 1912. Pp. xi + 388. \$2.50 net.

[Detailed papers and discussion of the Principles of Scientific Management, associated with the name of Mr. F. W. Taylor, including a paper of 33 pp. from Mr. Taylor himself.]

GILMAN (NICHOLAS PAINE). *Socialism: an Address.* Meadville Theological School Quarterly Bulletin. April, 1912. Pp. 40.

[The late Professor Gilman's last address is here reprinted, together with a bibliography of his writings, a portrait, and a series of addresses, delivered at the Meadville Theological School in commemoration of his life and services.]

GOLDMARK (JOSEPHINE). *Fatigue and Efficiency.* New York: Charities Publication Committee. 1912. Pp. xvii + 302 + 591. \$3.50.

[A publication of the Russell Sage Foundation. The first part deals with the subject of the title,—the New Strain in Industry, Fatigue and Output, Fatigue and Overtime, the New Science of Management, the Enforcement of Labour Laws, and so forth. The second part, which is not closely connected with the first, presents the substance of four briefs on *The World's Experience upon which Legislation Limiting the Hours of Labour for Women is based*, prepared by Louis D. Brandeis and Josephine Goldmark in defence of women's labour laws. To be reviewed.]

HEMMEON (J. C.). *The History of the British Post Office.* (Harvard Economic Studies, Vol. VII.) Cambridge (U.S.A.): Harvard University. 1912. Pp. xii + 261. 8s. 6d. net.

[To be reviewed.]

KENNGOTT (GEORGE F.). *The Record of a City: A Social Survey of Lowell, Massachusetts.* New York: Macmillan Company. 1912. Pp. xiv + 257. 12s. 6d. net.

LEVINE (L.). *The Labor Movement in France: a Study in Revolutionary Syndicalism.* (Columbia University Studies.) New York: Columbia University. 1912. Pp. 212. 6s.

[Reviewed above.]

Outlines of Economics, developed in a Series of Problems by Members of the Department of Political Economy of the University of Chicago. Second Edition. Chicago: University Press. 1911. Pp. xvi + 144. 4s. net.

[A revised edition of the systematic series of questions, "not intended to take the place of a text-book," originally published in 1911.]

PAYNE (E. GEORGE). *An Experiment in Alien Labour.* Chicago: University Press. 1912. Pp. 72. 3s. net.

[A critical study of Chinese labour in the Transvaal. Reviewed above.]

SPARGO (JOHN) and ARNER (GEORGE LOUIS). *Elements of Socialism: A Text-book.* New York: Macmillan Company. 1912. Pp. iv + 382. 6s. 6d. net.

[To be reviewed.]

French.

BLANCHARD (GEORGES). *Cours d'Economie Politique.* 2 Vols. Paris: Pedone. 1909—1912. Pp. vi + 712 + 907.

[By the Professor at the *Ecole française de Droit* at Cairo for the use of students of *Facultés et Ecoles de Droit*.]

BOURGIN (GEORGES and HUBERT). *Le Régime de l'Industrie en France de 1814 à 1830: Recueil de Textes publiés pour le Société d'Histoire Contemporaine.* Paris: Alphonse Picard. 1912. Pp. xxi + 381. 8 fr.

[The first volume of three, dealing with the period from 1814—1821. The documents, from which extracts are here printed, deal with the relations between employees, employers, and the State.]

BOYVAL (PAUL). *La Lutte contre le "Sweating-System." Le Minimum légal de Salaire. L'exemple de l'Australasie et de l'Angleterre.* Paris: Alcan. 1911. Pp. 718. 12 fr.

[With a preface by Comte Albert de Mun.]

DROUET (JOSEPH). *L'Abbé de Saint-Pierre: L'homme et l'œuvre.* Paris: Librairie Ancienne Honoré Champion. 1912. Pp. viii + 397. 7.50 fr.

GUYOT (YVES). *La Science économique: ses Lois inductives.* 4th Edition (entièrement refondue). Paris: Librairie Schleicher frères. 1912. Pp. xii + 387. 2.45 fr.

[The third edition of this book, which appeared in 1907 and was reviewed in the *Economic Journal* for September, 1907, by Professor Edgeworth, was a completely revised and rewritten version of the second edition which had appeared a dozen years previously. M. Guyot now adds some further important modifications, having

reference either to circumstances arising out of recent events, such as the American crisis of 1907, or to subsequent modifications which some of the doctrines under discussion have undergone, or to the author's controversies à propos of Rodbertus and Bastiat.]

JANSSEN (ALBERT E.). Les Conventions Monétaires. Paris. 1911. Pp. iv + 569.

LABORDÈRE (MARCEL). Les Migrations de l'Or en 1910. Paris: Coulommiers. 1912. Pp. 42.

[Reprinted with additions from the *Revue de Paris* of January, 1912. M. Labordère has collected the statistics, so far as they are obtainable, of the production, exports and imports of gold in *each individual country* during 1910. The table of figures, which he is able to give, is very valuable, and will become increasingly so if he is able to continue it for future years; and he precedes the table with an admirable account of the difficulties that stand in the way of complete accuracy.]

LE LAY (F.). Histoire de la Ville et Communauté de Pontivy au XVIII^e Siècle. Paris: Librairie Ancienne Honoré Champion. 1911. Pp. 396. 7.50 fr.

[An essay on municipal organisation in Brittany.]

RAPPARD (WILLIAM E.). Le Facteur Economique dans l'Avènement de la Démocratie Moderne en Suisse. Vol. 1.: L'Agriculture à la fin de l'Ancien Régime. Geneva: Georg & Co. 1912. Pp. 235.

[This is the first volume of a considerable work, projected by the author, on the economic history of Switzerland. The author publishes this first instalment now, because he has had to postpone for the present the completion of his work.]

THÉRY (RENÉ). Rapports des Changes Avariés et des Règlements extérieurs. Paris: Arthur Rousseau. 1912. Pp. 284. 8 fr.

[Reviewed above.]

German.

BENDIXEN (DR. FRIEDRICH). Geld und Kapital: Gesammelte Aufsätze. Leipzig: Duncker & Humblot. 1912. Pp. 187. M. 4.50.

[A collection of six essays on monetary topics, some of which have been printed already.]

CALWER (R.). Das Wirtschaftsjahr 1908. Erster Teil: Handel und Wandel. Jena: Fischer. 1912. Pp. vii + 349. M. 11.

CALWER (R.). Das Wirtschaftsjahr 1909. Erster Teil: Handel und Wandel. Jena: Fischer. 1912. Pp. vii + 354. M. 11.

HERCKENRATH (C. R. C.). Die ökonomischen Bedingungen des sozialen Lebens. Erster Teil: Bedürfnis, Genuss und Wert. München: Schweitzer. 1912. Pp. 188. M. 4.50.

* [The author seeks to bring the study of Economics into closer relations with Psychology and Sociology, and to avoid the commercial and industrial standpoint which seems to deal with commodities rather than human beings.]

HILLERINGHAUS (DR. AUGUST). Die deutschen Roheisensyndikate in ihrer Entwicklung zu einem allgemeinen deutschen Roheisenverbände. Leipzig: Duncker u. Humblot. 1912. Pp. 115. M. 3.

[Reviewed above.]

KAUFMANN (EUGEN). Das französische Bankwesen mit besonderer Berücksichtigung der drei Depositengrossbanken. Tübingen: J. C. B. Mohr. 1911. Pp. xii+372. M. 8.

[An important contribution to the study of French banking, containing a good deal of material not easily available elsewhere.]

KLÄRMANN (DR. SOPHIE). Die freien Gewerkschaften in Gesetzgebung und Politik. (Schnoller's *Staats- und sozialwissenschaftliche Forschungen*, 162). Leipzig: Duncker u. Humblot. 1912. Pp. vii+115. M. 3.

LIEFMANN (PROFESSOR R.). Die Unternehmungsformen. Stuttgart: E. H. Moritz. 1912. Pp. viii+216. M. 2.50.

[To be reviewed.]

MORGENSTERN (DR. MAX), KECK (DR. KARL), and BERNAYS (DR. MARIE). Auslese und Anpassung der Arbeiterschaft in der Lederwaren-, Steinzeug- und Textil-industrie. Leipzig: Duncker u. Humblot. 1912. Pp. vii+389.

[Part 3, Vol. 135 of the *Schriften des Vereins für Sozialpolitik*.]

NEUMANN (ANNA). Die Bewegung der Löhne der ländlichen "freien" Arbeiter im Zusammenhang mit der gesamtwirtschaftlichen Entwicklung im Königreich Preussen gegenwärtigen Umfangs vom Ausgang des 18 Jahrhunderts bis 1850. Berlin: Paul Parey. 1911. Pp. viii+400. M. 7.

[A learned and elaborate study of the history of agricultural wages in Prussia up to 1850.]

PLENGE (PROF. JOHANN). Die Zukunft in Amerika. Berlin: Julius Springer. 1912. Pp. 78. M. 1.60.

[Reprinted from the *Annalen für Soziale Politik und Gesetzgebung*.]

REIMERS (CHARLOTTE ENGEL). Die deutschen Bühnen und ihre Angehörigen: Eine Untersuchung über ihre wirtschaftliche Lage. Leipzig: Duncker u. Humblot. 1911. Pp. xix+772. M. 15.

[To be reviewed.]

TISCHER (DR. ALFRED). Der Kampf im deutschen Baugewerbe 1910. Leipzig: Duncker u. Humblot. 1912. Pp. viii+158. M. 4.50.

[The third part of the *Abhandlungen aus dem volkswirtschaftlichen Seminar der Technischen Hochschule zu Dresden*.]

Italian.

CANOVAI (E.). Le banche di emissione in Italia. Roma: Casa Editrice Italiana. 1912.

DALLA VOLTA (RICCARDO). Saggi economici e finanziari sull' Inghilterra. Palermo: Remo Sandron. 1912. Pp. viii+434. L. 5.

[Biblioteca di Scienze sociali e politiche, No. 77. To be reviewed.]

FRACCACRETA (ANGELO). Le forme del progresso economico in Capitanata. Naples: Luigi Piero. 1912. Pp. 173.

[To be reviewed.]

LABRIOLA (ARTURO). *Il valore della scienza economica*. Napoli: Società Editrice Partenope. 1912.

PACCHIONI (G.). *Imperialismo britannico*. Turin: Paravia. 1912.

SENSI (GUIDO). *La Teoria della "Rendita."* Rome: Ermanno Loescher. 1912. Pp. 469. L. 10.

[A discussion and comparison of the doctrines of Ricardo and Carey, with a chapter on mathematical theory. To be reviewed.]

TANGORRA (V.). *Saggio sulla domanda e offerta dei servizi pubblici*. Pisa. 1912.

WILLGREN (KARL). *Ofversikt af den modärna Statliga Inkomst- och Förmögenhets-vetkattningen i Europa. (Skattekommitténs Publikationer II.)* Helsingfors: Kejsarliga Sæmstens Tryckeri. 1911. Pp. vii + 724.

THE ECONOMIC JOURNAL

SEPTEMBER, 1912

A NARRATIVE OF THE COAL STRIKE.

THE purpose of this article is to set forth in order, for the use, perhaps, of future rather than present readers of *THE ECONOMIC JOURNAL*, the main events of the great coal strike of 1912. To this has been added a brief account of the work accomplished up to date by the Joint Boards established under the Act which closed the strike. No attempt has been made to analyse the underlying causes of the controversy, or to pass judgment upon its merits.

It will be best to indicate at once the main question at issue. The established method of remuneration for workers at the face of the coal was, and is, a system of piece-work; but in each district the piece rates were so calculated for each mine, or even for each seam, that a worker of ordinary efficiency under ordinary conditions should be able to earn a certain specified daily wage, fixed by negotiation for the whole district, and expressed as a rule as a percentage addition to the average wage which had been current in a particular year. Moreover, there was in most districts a minimum below which this county or district average should not fall; that in South Wales, for instance, was 35 per cent. above the standard of 1879, that in Scotland 50 per cent. above the standard of 1888. Thus in a sense a minimum wage already existed; but in some cases it might be a shadowy figure, bearing no precise relation to the piece-wages actually earned, and there was no certainty that every man would receive it. The chief reason for this was the existence of "abnormal places," where flaws in the rock and other natural obstacles rendered the process of hewing particularly difficult and slow. During the year 1910-11 the miners' efforts were concentrated on attempts to obtain special arrangements for such places;

but the more advanced of their leaders were not prepared to stop there, for in the first place the onus of proving that a place was abnormal would still rest upon the workman, and in the second place other causes of inability to earn the average wage were alleged, some of which were afterwards specified as "falls in roadways, breaking of haulage machinery, shortage of tubs, insufficient clearance caused by lack of trams and inconsiderate methods of the management." They therefore asked that a minimum daily wage should be guaranteed to every hewer, while his actual earnings if in excess of this minimum should vary as before with the amount of coal hewn—a method of payment familiar in the boot and other industries. The majority of owners on the other hand, while ready in general to consider special arrangements for abnormal places, held that owing to the difficulty of supervision underground, such a system would give them no guarantee against malingering, and that consequently a system of unadulterated piecework was alone applicable to workers at the face of the coal.

Declarations in favour of an individual minimum wage were carried at the instance of the Yorkshire delegates at the conferences of the Miners' Federation in 1909 and 1910, but for the purposes of the present narrative we need hardly go further back than the *crescendo* of resolutions passed by the conference at Southport in the early days of last October, when the "abnormal places" agitation was first definitely transformed into a serious campaign for a minimum day-wage for all underground workers. On October 5th the conference affirmed the necessity for facilities for the speedy and simultaneous termination of notices, in case of need, throughout the country: on October 6th it acceded to the request of the Northumberland delegates for national support, in the form, if necessary, of a general strike, to their demand for a minimum daily wage of 30 per cent. on to the basis of 1879 (*i.e.*, of 6s. 8d.), and for the abolition of the three-shift system. Finally, on October 7th, Rule 21 of the Federation was so amended that a general stoppage could be used henceforward as a means of aggression, not merely as before as a means of defence against wage-reductions, &c.; and the conference declared openly for a minimum wage—not necessarily uniform throughout the country—for all underground workers. The delegates were instructed to negotiate to this end with the employers in the several districts, and to lay the results of their efforts before a further national conference on November 14th.

Into the details of these negotiations it is not necessary to

enter; it is enough to state that in a series of meetings between November 4th and 10th the mineowners of Scotland, Durham, Northumberland, and South Wales severally rejected the men's demand. In the federated districts, which include the fields of Lancashire, Yorkshire, Cheshire, North Wales, and the Midlands, the position was different; for while the owners in some districts, such as Lancashire, declared themselves against the concession of the principle, yet the question of abnormal places, decided for South Derbyshire in the preceding December, was definitely settled in Nottinghamshire in October, while in November the Warwickshire men actually obtained an individual minimum of 7s. for all hewers; and at a meeting of the Conciliation Board for the whole area, held in London on November 10th, the representatives of the owners announced that they "could recommend the adoption of the principle of an individual district minimum wage," but must refer the matter back to the districts for further discussion till December 6th. Under the influence of this decision the conference of the Miners' Federation, resumed in London on November 14th, decided by a majority of 3 to 2 against taking an immediate ballot on the question of a national strike, and resolved to continue negotiations, both by districts and nationally. On December 6th and 18th the representatives of both sides for the federated districts held further meetings, and after the latter the owners announced that they could agree to another reference to the districts, "owing to further explanations given by the men as to the conditions to be associated with the minimum."

On December 20th the delegates of the Miners' Federation, numbering 164 and representing between 600,000 and 700,000 underground workers, met again at Caxton Hall, under the presidency of Mr. Enoch Edwards, M.P., to consider reports from the districts, and on the following day passed this momentous series of resolutions:—

- (1) That a ballot-vote be taken.
- (2) That the ballot-vote be taken on January 10th, 11th, 12th, 1912.
- (3) That no half-members be allowed to vote.
- (4) That the result of the ballot in each district be sent to Mr. Ashton not later than January 16th, 1912.
- (5) That in case the ballot-vote results in a two-thirds majority in favour of a national stoppage, notices be given in every district so as to terminate at the end of February, 1912.

- (6) That each district send to Mr. Ashton a tabulated statement of what it desires to be its minimum wages, and that the Executive Committee of the Federation meet to consider these statements, and report to a national conference to be held at Birmingham on January 18th, 1912.
- (7) That the form of the ballot-paper should be as follows :—
Are you in favour of giving notice to establish the principle of a minimum wage for every man and boy working underground in the mines of Great Britain?
- (8) That during negotiations special machinery be set up in each district for dealing with exceptional cases, such as old and infirm workmen.

One point among others in the above manifesto 'deserves attention. The question of the abolition of the three-shift system in the north, which at the instance of the Northumberland delegates had formed part of the Southport programme, is tacitly dropped, and henceforth disappears from the controversy.

The interval between Christmas and January 10th was spent in preparing for the ballot. The executives of the South Wales and Scottish Federations recommended their men to answer in the affirmative, and some of the Yorkshire leaders made public utterances to the same effect. On the other hand, such old and trusted leaders as Mr. Burt, Mr. Fenwick, and Mr. Wilson (the Durham Miners' President) publicly expressed their disapproval of the policy of the Federation. In Northumberland the men applied successfully for $1\frac{1}{2}$ per cent. advance on standard.

On January 9th public attention was recalled to the situation by a rise of coal prices on the Cardiff and Newcastle exchanges, and by a speech from Mr. Smillie, the Scottish miners' leader, at Larkhill, strongly urging a strike; on the following day the ballot began. At the same moment the situation was complicated by the decision of the Executive of the South Wales mechanics (who were not included in the general movement) to recommend a strike for an advance in wages. The original intention was to keep the results of the ballot secret until the meeting of the Federation on the 18th, but many of the figures leaked out, and it became generally known that the ballot was going heavily in favour of a strike. The result was seen in a rise of 3s. for best and 3s. 6d. for other coal on the London exchange on January 12th, bringing best Wallsend to 32s. Nevertheless, negotiations were continued, and there was even talk of a compromise in South Wales on the basis of a minimum for

abnormal places and a rise in the wages of the lower-paid grades. But on January 15th the South Wales Conciliation Board disbanded without a settlement, and on the same day a meeting between the men's representatives and the non-federated employers in the federated districts (numbering about 30 per cent. of all the employers in that area) ended in failure.

On the 18th the conference of the Miners' Federation re-assembled at the Central Hall, Birmingham, and after a remarkably pacific speech by the chairman, Mr. Enoch Edwards, the ballot figures were officially announced. They were as follows :—

	For.	Against.	Majority.
Yorkshire	63,736	10,477	53,259
Lancashire and Cheshire ...	50,517	11,193	39,324
Midland Federation ¹ ...	26,069	5,275	20,794
Derbyshire	17,999	6,816	11,183
Nottinghamshire	17,086	5,386	11,700
Leicestershire	3,681	907	2,774
South Derbyshire	2,178	593	1,585
North Wales	7,327	1,566	5,761
Cumberland	4,918	813	4,105
Bristol	1,084	342	742
Somerset	8,378	370	3,008
Scotland	60,611	12,035	48,576
South Wales	103,526	18,419	85,107
Northumberland	22,595	7,557	15,038
Durham	57,490	28,504	28,986
Cleveland ²	2,021	5,225	3,204 ³
Forest of Dean	1,585	243	1,342
	<u>445,801</u>	<u>115,721</u>	<u>330,080</u>

The strength of the Federation was well over 600,000, the number of votes only some 561,500; but it must be remembered that no half-members, *i.e.* boys under a certain but varying age, were allowed to vote. It seems probable, however, that the voting strength of the Federation was about 587,000, and that in Derby, Notts, and the Midland Federation especially there were a considerable number of abstentions.

The results may be more conveniently summarised as follows :—

	For.	Against.
South Wales	103,526 or 85% of those voting	18,419 or 15%
Scotland	60,611 „ 84% „ „	12,035 „ 16%
Federated Area	188,593 „ 82% „ „	42,213 „ 18%
Northumberland	22,595 „ 75% „ „	7,557 „ 25%
Durham	57,490 „ 67% „ „	28,504 „ 33%
Rest of England	12,986 „ 66% „ „	6,993 „ 35%
	<u>445,801 or 80%</u>	<u>115,721 or 20%</u> ⁴

¹ Staffordshire, Warwickshire, Shropshire, and Worcestershire.

² Ironstone miners.

³ Majority against.

The conference met again on the following day; the official report of its proceedings ran thus :—

The Chairman, on behalf of the Executive Committee, submitted the following resolution :—

“Seeing that the ballot vote was in favour of tendering notice, in accordance with the resolution passed at the conference held on December 21st, 1911, this conference agrees that the notices be tendered in every district so as to terminate at the end of February.”

This resolution was carried unanimously.

The question as to whether further negotiations should take place was discussed very fully, and ultimately the following resolution was carried :—

“That an intimation be made to the employers that the workmen’s representatives are prepared to meet them to continue negotiations in districts and nationally with a view of arriving at a satisfactory settlement.”

It was therefore agreed that the conference stand adjourned and be again resumed in London on Thursday, February 1st.

The conference was thus adjourned till February 1st; the interval was spent in renewed efforts at conciliation. In particular the representatives of the federated area, working both in full assembly and by means of a small sub-committee of nine, held a promising series of meetings. In Wales, on the other hand, there seemed small chance of agreement; and even this was lessened by the news that the mechanics, by a majority on a ballot of 8,603 to 736, had endorsed the recommendation of their executive to give a month’s notice on February 1st. In Scotland the miners gave the requisite six months’ notice, which was accepted, to terminate the existing agreement of 1909; but their minimum wage proposals were again rejected as a breach of the same agreement. On the 30th the hopes of the public were again raised by the announcement that through the efforts of the two secretaries of the Federated Districts Board, Sir Thomas Ratcliffe-Ellis and Mr. Ashton, a joint national conference had been arranged for Wednesday, February 7th.

On the 1st of February the first notices, those of South Wales, were handed in; and the conference of the Miners’ Federation reassembled at the Westminster Palace Hotel. The executive had spent the interval in considering the schedules of minimum rates handed in by the various districts, and had found their task complicated by an attempt to obtain a general advance of 1s. in South Wales, and of 2d. or 3d. in Northumberland. The result

of their examination was seen in the important resolution passed by the conference on the following day : it will be noticed that in many cases the minima represent a reduction on those originally demanded, which are printed for convenience of reference in a parallel column.

The resolution ran as follows :—

"1. In accordance with the resolution agreed upon at the last meeting of this conference held in Birmingham and based upon the resolution passed at the conference held in London on November 15th last, the following claims be formulated for the individual minimum wage in each district for pieceworkers at the face of the coal :—

		Original demands.
Yorkshire	7s. 6d.	8s. 0d.
Lancashire	7s. 0d.	7s. 0d.
Midland Federation ...	6s. 0d. to 7s. 0d. ¹	5s. 6d. to 7s. 1½d. ¹
Derbyshire	7s. 1½d. to 7s. 6d. ¹	8s. 0d.
Notts	7s. 6d.	7s. 9d. and 8s. 3d. ¹
North Wales... ..	6s. 0d.	7s. 0d.
Leicester	7s. 2d.	7s. 2d.
South Derbyshire ...	6s. 6d.	6s. 0d. to 7s. 6d. ¹
Somerset	4s. 11d.	6s. 0d.
Bristol	4s. 11d.	6s. 0d.
Cumberland	6s. 6d.	6s. 6d.
Scotland... ..	6s. 0d.	6s. 0d.
South Wales... ..	7s. 1½d. to 7s. 6d. ¹	8s. 0d.
Northumberland ...	6s. 0d. to 7s. 2d. ²	6s. 0d. to 6s. 9d. ²
Durham... ..	6s. 1½d.	6s. 1½d.
Forest of Dean ...	5s. 10d.	6s. 0d.
Cleveland	5s. 10d.	6s. 0d.

"2. No underground worker shall receive a rate of wages less than 5s. per shift, this not to apply to Somersetshire, the Forest of Dean, and Bristol.

"3. The individual minimum wages for all pieceworkers other than colliers to be arranged by the districts themselves, and to be as near as possible the present wages.

"4. Seeing that the rates paid to the underground workers who are paid by day wage are so complex and difficult to deal with generally, we leave this matter to the districts, with instructions that they endeavour to arrange minimum rates for each class or grade of these workers locally in each district.

"5. Arrangements for boys' wages to be left to the districts, but to be not less than present wages, nor in any case less than 2s. per day, Somerset, Bristol, and the Forest of Dean being exempted.

"That a conference of this Federation be called to meet in London on Tuesday, February 13th, at 10 a.m."

¹ Variations owing to differences in age and difficulty of pits.

² " " " in length of working day.

A few days later the men's representatives for the federated area met again to consider reports from the districts: and the South Wales Federation accepted the schedule figure, while expressing regret that it had been lowered, and a resolution that there should be no final settlement without a ballot taken. On the same day, Mr. W. Abraham, M.P., whose counsels had all along been on the side of peace, retired from his long tenure of the Presidency of the Federation.

On February 7th the promised national conference met in London: the official report of its proceedings is as follows:—

"A meeting of coalowners and miners' representatives from the several districts in the United Kingdom took place at the Westminster Palace Hotel to-day, Mr. Frank Brain, Forest of Dean, in the chair, and Mr. Enoch Edwards, M.P., in the vice-chair.

"The following resolution was handed to the miners' representatives:—'The owners are prepared to assent to the proposition that each person in their employment should receive a fair day's wage for a fair day's work, but are convinced that the principle of payment in proportion to the amount of work performed is the only one which can be applied successfully in the case of coal-getters.

"They are aware that there are cases in which, owing to difficulties arising in consequence of exceptional conditions in the working place, a man, while doing his best, is unable to earn what he would under ordinary circumstances. In such cases the owners recognise the necessity for special consideration, and are willing to discuss with the workmen the means by which this shall be ascertained. In assenting to the above, those districts which are now under agreement reserve their rights thereunder, and the districts comprised in the English Conciliation Board area preserve their rights to continue their negotiations.'

"The following resolution was handed by the representatives of the men to the coalowners:—

"That we express our regret that the coalowners have refused to accept the principle of an individual minimum wage for all men and boys employed underground, as we know that there can be no settlement of the present dispute unless this principle is agreed to. In view of the fact, however, that we have no desire for a serious rupture in the coal trade of the country, we are willing to meet the coalowners at any time to further discuss the matter if the coalowners express a desire to do so.'

"The owners promised to give the latter resolution further consideration."

A noteworthy fact was the retirement of the South Wales owners at an early stage of the proceedings. Their reasons for this action were explained by their Secretary, Mr. Dalziel, in two statements, which, as they fairly represent their attitude throughout the controversy, are worth quoting *in extenso* :

"Mr. Edwards stated that there are no agreements for a fixed minimum wage, and that to that extent the workmen's representatives are rather treating the existing agreements with scant courtesy. Mr. Edwards further intimated that while the workmen's representatives would be prepared to accept any suggestions, the acceptance of this minimum wage is the point upon which the workmen will cease to work until it is conceded. This being a notification of the workmen's intention to tear up existing agreements, the South Wales owners are unable to take any further part in the proceedings.

"In explanation of the decision of the South Wales coalowners, it may be mentioned that the South Wales Conciliation Board agreement, under which Lord St. Aldwyn acts as independent chairman, was entered into in March, 1910, for a period of five years, and has, therefore, three years yet to run. That agreement was not signed by the South Wales Miners' Federation until the terms had been submitted by the workmen's representatives to the Miners' Federation of Great Britain, and that organisation had recommended its adoption, and until a ballot of the whole of the South Wales workmen had also decided upon its adoption. It may further be mentioned that immediately the attitude of the Miners' Federation of Great Britain, as already explained, had been stated to-day by Mr. Edwards, the South Wales owners retired to consider their position, and their reply as stated was given at once."

Two days later the same owners refused an application made in the ordinary manner for a $1\frac{1}{4}$ per cent. advance on standard : the question was submitted to the independent chairman, Lord St. Aldwyn, who decided in the men's favour. This victory was followed by further abortive attempts at conference, the failure of which was made plain by a "no surrender" speech by Mr. D. A. Thomas at Cardiff on the 17th. Meanwhile, the requisite fortnight's notice had been given in Northumberland, Durham, and the federated districts.

On Saturday, February 17th, the Government, which had been

watching the course of events with close attention, and had been severely blamed by certain sections of the Press for its apparent passivity, first entered upon the scene. Sir Edward Grey, speaking at Manchester, drew attention to the gravity of the situation, but declared that talking in public could do no good, while talking in private might still do much. On the following Tuesday *The Times* was able to announce that "Sir George Askwith has been in communication with the Industrial Council, and has made representations to the Government, which, with the other information in their possession, will cause them to take action at once." On the same day the Prime Minister addressed letters to the leaders of the owners and miners, inviting them separately to meet him and some of his colleagues at the Foreign Office on Thursday, February 22nd.

Meanwhile the Federated Districts Board had continued its efforts. The owners' final offer was of a wage of 7s. 1½d. in abnormal and 6s. 1½d. in normal places, accompanied by elaborate machinery to prevent malingering and by an agreement for a probationary period of two years from July, during which no alterations in wages should take place. The men replied accepting the principles, though reserving their opinion as to the details, of the proposed machinery, but insisting on the published schedule of rates, and rejecting the suggestion of a lower wage for normal than for abnormal places, and of a probationary period. The negotiations were thereupon suspended.

The interest of all sections of the community was now thoroughly aroused. A continued advance in coal prices in the provinces was followed on the 21st by a further rise of 2s. on the London Exchange. The Executive Committee of the Transport Workers' Federation decided to recommend its men to render all necessary assistance to the miners, and an international conference representing the miners of Great Britain, France, Germany, Austria, and Belgium met in London to discuss the question of the restriction of exports to England in the event of a strike. Anxiety was rife in the iron trade of the north-east coast, and notices of discharge were given by many employers in the Midlands and by the Great Central Railway. The Admiralty made heavy purchases of coal, and the Archbishop of Canterbury a special strike prayer; while on the 24th, 170 Lord Mayors and Mayors from all parts of the country assembled at twenty-four hours' notice at the Mansion House, and insisted that no strike should take place.

The Prime Minister's invitations were accepted, and on Thurs-

day the 22nd, accompanied by Sir Edward Grey, Mr. Lloyd George, and Mr. Sidney Buxton, and by Sir George Askwith, Sir H. Llewellyn Smith, and Mr. Mitchell, of the Board of Trade, he held two meetings with the officers of the Miners' Federation, Messrs. Edwards, Smillie, Abraham, and Ashton, and one with seventy representatives of the coalowners. Their position was explained by Sir T. Ratcliffe-Ellis for the Federated Area, Mr. F. L. Davies for South Wales, Sir Hugh Bell for Durham, Mr. Thomas Taylor for Northumberland, Mr. A. K. McCosh for Scotland, and Mr. Frank Brain for the English districts of the south-west; and a committee of twenty-three was appointed to treat further with the Premier. The miners' officials, on the other hand, explained that they had no authority to negotiate until the reassembling of the Federation conference, which had been fixed for the following Monday, and could not be hastened. Mr. Asquith thereupon invited the conference or a committee thereof to meet him on Tuesday morning.

It had been intended that the notices should terminate simultaneously on the last day of February, but this was found to be impossible, and the beginning of the strike extended over the whole week of February 26th to March 2nd. On Monday, February 26th, several thousand men left work at Alfreton, in Derbyshire; on Tuesday 25,000 struck in Derbyshire, 8,000 in Notts, and some thousands in Leicester and South Yorks; by Wednesday 115,000 were idle, mostly in the Federated Area; by Friday morning Scotland, Northumberland, Durham, and most of South Wales had come out, and the number reached 803,000, while the surfacemen of Derby and South Yorks also left work; on Saturday the last notices expired in South Wales, Warwickshire, and Cannock Chase, and 44,000 more men laid down their tools.

To return to the negotiations: the Federation conference met on Monday, February 26th, and at once accepted the Premier's invitation. On Tuesday, Mr. Asquith held meetings with the whole body, with its executive committee, and with the coalowners' committee, and imparted to them the Government's proposals. They were as follows:—

(1) His Majesty's Government are satisfied, after careful consideration, that there are cases in which underground employees cannot earn a reasonable minimum wage, from causes over which they have no control.

(2) They are further satisfied that the power to earn such a wage should be secured by arrangements suitable to the special

circumstances of each district. Adequate safeguards to be provided to protect the employers against abuse.

(3) His Majesty's Government are prepared to confer with the parties as to the best method of giving practical effect to these conclusions, by means of district conferences between the parties, a representative appointed by the Government being present.

(4) In the event of any of the conferences failing to arrive at a complete settlement within a reasonable time, the representatives appointed by his Majesty's Government to decide jointly any outstanding points for the purpose of giving effect in that district to the above principles.

These proposals were at once accepted by some 60 per cent. of the owners, to wit, those of the Federated Area, who coupled their assent with a demand for safeguards that the agreements formed should be binding, of Durham, who called attention to the heavy burden imposed upon the industry, and of Cumberland. They were rejected by the owners of Scotland, who, while offering to reopen the question of abnormal places, announced their intention of adhering to the 1909 agreement; of South Wales, who also objected to them as a breach of the existing agreement; and of Bristol, Somerset, and the Forest of Dean. The Northumberland owners also at first rejected the proposals, but a day later announced their acquiescence in the first two.

The Miners' Federation were unable to accept the proposals; they insisted on their published schedule, declined to express a definite opinion on the question of safeguards, and made it plain that work should not be resumed anywhere till a national settlement was obtained; at the same time they expressed their willingness to continue negotiations. They also passed a resolution permitting a sufficient number of men to work to secure the safety and ventilation of the mines, and the care of the pit-ponies.

On Thursday, February 29th, Mr. Asquith attended and addressed a meeting of the Federation Conference. He repeated that the Government were satisfied of the reasonableness of the principle of the minimum wage, and added that they did not intend that the resistance of a minority of the owners should indefinitely delay the attainment of an object consistent with justice and the best interests of the community; which, if it could not be secured by agreement, the Government would secure by every means necessary for its effective attainment. But there must be a reasonable latitude of discussion; if the Government were to be responsible, they must be allowed to discuss with

representatives of both sides whether any given figure was reasonable for any given area. The conference shortly afterwards adjourned, but the executive committee remained in London, and (having now obtained authority from the conference) continued to negotiate with the Premier. One of its sittings was attended by Mr. Ramsay Macdonald and three other Labour members, which marks the first appearance of the Parliamentary Labour Party on the scene. The Premier also continued negotiations with the coalowners' committee, and with a committee appointed by the Industrial Council, and made a full statement of the Government's attitude to the House of Commons, in which he took the opportunity of denying a persistent rumour that in his address to the miners he had declared himself in favour of a minimum wage in every industry.

Meanwhile, the effects of the strike upon the country in general became apparent. London coal prices rose another 2s. on March 4th, bringing the best quality to 36s., and the price of bread was raised three days later. Many other articles of food also rose in price throughout the country. The Workington steel works had closed down two days before the strike actually began; and the iron and steel trades in general, as well as the shipping, tinplate, pottery, glass and brick trades were seriously affected at an early date. By March 6th the number of non-strikers thrown out of work was estimated at 250,000, by March 11th, at 655,000. On March 5th many of the leading railway companies restricted their passenger services: in Manchester over 700 trains were taken off. The rest quickly followed suit, except the Great Eastern, which maintained its usual service throughout. The London metropolitan traffic was not seriously curtailed till the following week, when further drastic restrictions also took place throughout the country. The goods traffic was not so speedily disorganised; but before long the carriage of heavy goods, such as all kinds of ore and stone, was generally suspended, and the efforts of the companies (who throughout made efforts to secure co-operation and community of policy) were concentrated on the carriage of food and other immediate necessities.

On March 8th the Government took a further step by issuing the following invitation:—"His Majesty's Government consider that the proposals which they have already placed before the representatives of both parties offer the fairest means of arriving at a satisfactory settlement of the dispute. In view, however, of the difficulty of making any progress towards a settlement without mutual discussion, his Majesty's Government invite both

parties to meet them jointly in conference, without prejudice, with a view to the free discussion of the whole situation."

The executive of the Miners' Federation undertook to re-assemble the national conference at the earliest possible moment, and submit to it the invitation, with the reservation that they could not recommend its acceptance except on the understanding that the principle of the minimum was excluded from discussion. As the South Wales owners on the same day reaffirmed their objection to the principle, it seemed at first doubtful whether they would join the conference; but eventually both they and the Scottish owners joined the others in accepting the invitation, making it plain that this action did not indicate any change of attitude on the main question.

The joint conference, consisting of the Prime Minister, Sir Edward Grey, Mr. Buxton, Sir George Askwith, and four other officials, twenty-three coalowners, and the nineteen members of the Miners' Committee, met on March 12th and the two following days. It is to be noted that the men, in accepting the invitation, did not make any reservations as to their schedule of minimum rates, and the impression that they were prepared to negotiate by districts on this matter was confirmed by a declaration of the Federation on March 13th that it was willing "to enter into negotiations at once with the coalowners in the various districts for the purpose of securing a settlement of all points in dispute at the earliest possible moment." On the following day, however, it decided that with reference to its resolution of February 2nd, it could not take the conduct of negotiations about points 1, 2, and 5 (referring to the wages of pieceworkers at the face of the coal, and to the "bed-rock" minimum of 5s. and 2s. for underground day-workers, men and boys), out of the hands of its executive committee; but agreed that when these points were agreed to, points 3 and 4 (referring to underground pieceworkers other than colliers and to the actual minima for the various classes of underground day-workers) should be dealt with by local negotiations; and also acquiesced in the presence at these local negotiations of some neutral person "to help guide discussion to facilitate agreement," as suggested by the Prime Minister.

On the 15th, the Prime Minister announced the failure of the conference, and the Government's intention of "asking from Parliament a legislative declaration that a reasonable minimum wage, accompanied by adequate safeguards for the protection of the employer, should be a statutory term of the contract of employment of people who are engaged underground in coal-mining."

He indicated that the district minima should be locally fixed by a joint Board in each district, with a neutral and independent chairman. The conference of the Miners' Federation thereupon disbanded, after authorising its executive to watch the Bill, and refusing to resume work until it was passed and its final shape had been seen.

The Premier's announcement did not materially relieve the tension : a further advance of 4s. took place in London coal prices, the best quality reaching 40s., and the South Wales owners issued another manifesto, declaring that surrender would mean the closing of many pits and a reduction of output by 30 to 50 per cent. Representatives of both sides were consulted in drafting the Bill, which was introduced by Mr. Asquith on March 19th. Its main provisions were as follows : —

"It shall be an implied term of every contract for the employment of a workman underground in a coalmine that the employer shall pay to that workman wages at not less than the minimum rate settled under this Act and applicable to that workman," unless he is excluded from the right to them by reason of old age or infirmity or non-compliance with the conditions regarding regularity and efficiency of work.

Joint Boards to be set up in each of the twenty-two districts mentioned in a schedule to decide on the minimum rates and to form rules laying down the conditions of exclusion from their operation. Each Board to have a chairman with a casting vote, appointed by agreement or by the Board of Trade.

The Boards to have power to subdivide or amalgamate their districts, or to make special rates and rules for special mines : and to revise their own rates and rules. The rates when fixed to be retrospective to the date of the passing of the Act.

In case of failure of either or both sides to appoint representatives, the Board of Trade to take the matter into its own hands.

The Act to be in operation for three years only, unless renewed.

It met at first with a non-committal reception. Mr. Bonar Law confined himself to criticising the Government's methods of dealing with the situation ; Mr. Ramsay Macdonald "would like to see the meaning of the phrase interpreted in £ s. d.," but promised Labour Party support. Almost immediately opposition began to harden. The Coalowners' Committee expressed their dissatisfaction that the devising of safeguards had been relegated to the District Boards instead of being embodied in the text, and drafted nearly fifty amendments, of which the most important proposed

that the rates fixed should not be retrospective, that the employer should be entitled to deduct the difference if the workman could be proved to have earned less than the minimum, that contracts for delivery of coal based on the existing wage-rates should be taken into account in fixing the minima, and that the independent chairman should have full powers of arbitration. The Federations of employers in the engineering, shipping, and cotton trades registered protests against the legislative sanction of the principle of a minimum wage. The Miners' Federation decided unanimously to press for the inclusion of the 5s. and 2s. minima for day workers, and (after discussion and by a narrow majority) for that of the schedule for hewers; and the Labour Party, which was now in constant communication with the Miners' Executive, decided to vote for the second reading, but to press for the Miners' amendments in committee.

On March 21st, Mr. Balfour, on behalf of the Unionist Party, moved the rejection of the Bill. In an impressive speech to a crowded House he dwelt on the dangerous precedent established, and on the legalised violation of existing agreements; his motion was defeated by 348 votes to 225. The following day most of the coalowners' amendments were defeated in committee; so were those of the Labour Party to include the hewers' schedule, and to excise the power of the Boards to subdivide their districts. Mr. Buxton inserted an amendment to the effect that higher wage-rates under existing agreements or customs should not be prejudiced by the Act. In the debate on what became known as "the 5 and 2 question," Mr. Ramsay Macdonald intimated that if this amendment were accepted, the miners would be prepared to waive the schedule, and Sir Edward Grey suggested that a further conference on this basis should be held on the following Monday.

On Monday, March 25th, London coal prices rose from 40s. to 45s. for best, and by 4s. for other qualities. On the same day the first defections took place; 1,000 men resumed work in Lanarkshire, and the Chirk colliery in North Wales was reopened. Throughout Monday and Tuesday the Government conferred separately with the two parties, and for a few moments on Tuesday afternoon they were brought face to face. The Government is understood to have suggested an immediate break-up into district conferences in London, and also immediate joint national conference with a member of the Government in the chair; and to have been meanwhile maturing its plans for the relief of distress and the protec-

tion of workers and of the food-supply in case of ultimate failure. Meanwhile the discussion of the Bill was suspended.

On Tuesday night Mr. Asquith, in a memorable speech, announced to the House the final failure of negotiations, and the passage of the Bill was hastened. The "5 and 2" amendment was moved by Mr. Brace, a miners' representative, on the report stage, and rejected by 326 votes to 83, about 50 Liberal members voting against the Government. The Unionist Party voted for, the Labour Party against, the third reading, which was carried by 213 votes to 38. The Bill passed the House of Lords without a division, though not without protest, on Thursday, and received the Royal assent on Friday, the 29th.

A curious incident, which provoked much resentment at the time, is worth recalling, as it became of some importance later. On Tuesday Mr. Buxton had inserted an amendment directing the Boards to "have regard to the average daily rate of wages paid"; the coalowners were afraid this might be taken to refer to piece-workers, who, if their *minimum* were fixed at the *average*, would probably often earn less than it, and would have little incentive to try to surpass it. They therefore asked for the substitution of the words "the prevailing daily wage-rate," which the Government, after consultation with one or two of the men's leaders (the rest having left London), promised to effect in the Lords. It then appeared that the general feeling of the miners' leaders was against the change, which they considered encouraged the Boards to grant no advance to day-workers on the prevailing rates; and after the Bill had in consequence been delayed a day in the Lords, the original words were allowed to stand, with a gloss from Lord Crewe to the effect that they referred only to day men. The coalowners thereupon brought a charge of breach of faith against the Government, who replied that they only consented to the alteration at so late a stage on the understanding that it was non-contentious.

Meanwhile, the Miners' Federation conference had met on the 27th, and decided to take a ballot on the question, "Are you in favour of resuming work pending the settlement of the minimum rates of wages in the various grades of work by the District Boards to be appointed under the Mines Minimum Wage Act?" After a keen discussion it was decided to make no official recommendation to the men as to which way to vote. A meeting of representative coalowners, while reaffirming their uneasiness at legislative interference with rates of wages, advised their fellows to make every endeavour to give effect to the law. Mean-

while the strike continued. On the 27th the prices of all coal in London reached 46s. (an advance of 1s. on the best quality), and it was found necessary to send troops to North Wales and Cannock Chase.

It was generally expected that, except perhaps in Northumberland, the ballot would show a heavy majority for resumption, and most of the prominent leaders of the men, including even such "irreconcilables" as Mr. Hartshorn in South Wales and Mr. Smillie in Scotland, publicly advocated this course. The first ballots took place in North Wales on the 28th, and showed a 5 to 2 majority for resumption; the figures published on Monday, April 1st, showed a 3 to 1 majority against in Lancashire, but a total of 25,000 for and 17,500 against; on the same day London coal prices fell slightly. But it soon became evident that the public expectation was wrong, and that in Scotland and the North of England the voting was heavily in favour of continuing the strike. The final figures were announced to the Miners' Executive by Mr. Ashton on April 4th; they were as follows:—

	For resumption.	Against.	Majority	
			For.	Against.
Yorkshire	13,267	43,914	—	30,647
Lancashire and Cheshire ...	11,334	29,840	—	18,506
Midland Federation ...	18,168	11,278	6,890	—
Scotland	23,186	30,473	—	7,287
South Wales	62,538	31,127	31,411	—
Northumberland	10,674	14,195	—	3,521
Durham	24,511	48,328	—	24,317
Bristol	772	326	446	—
Somerset	2,130	1,220	910	—
Derby	8,080	13,428	—	5,348
South Derby	1,626	1,000	536	—
Leicester	1,195	3,104	—	1,909
Nottingham	8,187	8,213	—	26
Cumberland	2,980	4,877	—	1,897
North Wales	7,446	1,190	6,256	—
Cleveland	4,919	908	4,011	—
Forest of Dean ¹	—	—	—	—
	<u>201,013</u>	<u>244,011</u>		<u>42,998</u>

¹ No ballot, but believed to be for resumption.

The following comparison presents points of interest:—

	Voted for strike.	Voted for continuance of strike.
South Wales	85 per cent.	32 per cent.
Scotland	84 "	57 "
Federated Area	82 "	62 "
Northumberland	75 "	56 "
Durham	67 "	66 "
Rest of England	65 "	42 "
Great Britain	<u>80 per cent.</u>	<u>55 per cent.</u>

The percentages are of those voting in each case ; but in the first ballot the abstentions were less than 5 per cent., in the second ballot were about 24 per cent. of the estimated voting strength of the Federation. The most remarkable change was in the case of South Wales, where the prevailing distress and the exhaustion of strike funds were no doubt largely responsible.

The executive committee was now in rather a delicate position. Counting probably on a simple majority in favour of resumption, it had omitted to make plain what majority was necessary to sanction a continuance of the strike ; but it now declared that, as a two-thirds majority had been necessary to start the strike, a two-thirds majority would be necessary to continue it ; at the same time it left the final decision to a conference to be called on the following Saturday, contenting itself with a recommendation in favour of resumption. The conference met on Saturday, April 6th, and after some discussion endorsed the executive's recommendation by 445,000 votes to 125,000. This remarkable change of front is probably to be explained by the fact that most of the delegates (except those of Yorkshire and some parts of Scotland, who had been definitely instructed to vote against resumption) came to this conference with a free hand, and were thus enabled to follow their own judgment and to attach due weight to the arguments of the executive. The strike was thus formally declared at an end, while arrangements for the dates of resumption were left to the several districts.

Already on March 29th the men had begun to go back in Warwickshire ; on April 1st in a few pits in Lancashire and North Wales ; on April 4th in Cannock Chase and elsewhere ; and on April 5th in the Bristol district. But in many parts of the country a general resumption was still delayed by the condition of the pits, the occurrence of the Easter holidays, and certain outstanding disputes with the surfacemen. On Easter Monday, however, Scotland was at work, and the next day Cumberland went back ; the Durham enginemen accepted the owners' terms, and the Yorkshire surfacemen's dispute was also settled. On Thursday work spread rapidly in the Federated Area, and the South Wales leaders advised their men not to remain out any longer on behalf of the still unappeased enginemen. Meanwhile there had been a set-back in Lancashire. On Tuesday, Mr. Greenall, one of the men's leaders, advised staying out till the minimum rates had been settled, and for the next two days there was considerable feeling against resumption, culminating in riots and the sending of troops. On Thursday the revolt collapsed, and Lancashire went back to

work. At the end of the week half South Wales was still idle, but on Saturday the Derbyshire surfacemen's dispute was settled, and on Monday the 15th the South Wales enginemmen, while expressing their resentment against the miners, decided to go back, and the last obstacle to a general resumption of work was removed. Meanwhile a general revival of industry began; the railway services were improved, and the export of coal was resumed from Sunderland on April 11th. London coal prices fell 10s. on April 12th, bringing the best quality to 35s., and a further 5s. fall took place on the 17th.

It is not the purpose of the present narrative to comment on the general features or incidental effects of the strike; nevertheless one or two points cannot remain unmentioned. First as to the methods of the strikers. Besides the final riots in Lancashire just mentioned, there was, in the second half of March, a succession of minor disturbances in North Wales, in the neighbourhood of St. Helen's, and in some parts of Scotland; but on the whole the struggle, owing no doubt in part to the solidarity of the miners and the impossibility of obtaining substitute labour, was carried on under remarkably peaceful and orderly conditions. The football match arranged at a Midlands mine between the strikers and the managerial staff, at the close of which both teams were entertained to tea by the general manager, was not uncharacteristic of the temper of the whole proceedings. As to the effect on other industries, some of the main facts—on the one hand the rise of the Board of Trade unemployment percentage for March to 11·3 and the paralysis of the iron, pottery and other trades, and on the other the comparative immunity of the textiles, and the actual increase in exports other than coal—have been referred to in the last number of this Journal; but we may add that the railway goods and mineral traffic receipts for March showed a decrease of £1,979,353 or 41·4 per cent. on the corresponding figure for 1911. The general distress caused was considerable in some districts, notably South Wales, the Potteries, and the north-east coast, but on the whole not as great as had been anticipated. As to the direct losses of the miners, the loss in working days is estimated at about 30 millions, and in wages at about £7½ million; by April 6th the miners' Unions had paid out in strike benefits £1,205,900 out of a nominal total in January of £1,994,150, and except in Durham, Derby, and Northumberland their funds were practically exhausted; nor does this probably represent nearly the whole of the savings expended for strike purposes.

It remains to consider the work of the Joint Boards appointed under the Act. In some cases, as in South Wales, the existing Conciliation Boards were utilised, in others new Boards were set up. In some districts preparations began as early as April 2nd, but in others they were long delayed; most of the awards were given in April and May, but that of Scotland was not completed till June, nor that of South Wales till July, and that of Bristol is not yet to hand. A summary of the awards on the two questions most debated during the strike is given below :—

	Name of Chairman.	Demanded by Schedule of February 2.		Conceded.	
		Piece- workers.	Day- workers.	Piece- workers.	Day- workers.
South Wales.	Lord St. Aldwyn	7/1½ to 7/6	5/-	6/11	4/9½
North-					
Northumberland	Lord Mersey ¹	6/- to 7/2	5/-	5/6	4/9½
Durham . .	Sir Robert Romer ¹	6/1½	5/-	5/6	4/9
Cumberland .	Sir William Collins ¹	6/6	5/-	6/-	2/-
Lancashire					
and Cheshire	Judge Bradbury	7/-	5/-	6/6	5/-
Cleveland .	Sir Robert Romer ¹	5/10	5 -	5/4	4/3
N. Stafford .	Judge Bradbury ¹	6/- to 7/-	5/-	6/-	5/-
South Derby .	A. A. Hudson, K.C. ¹	6/6	5/-	6/-	4/6
Leicester . .	Judge O'Connor, K.C. ¹	7/2	5/-	6/2	4/10
Forest					
of Dean	Russell Kerr	5/10	—	5/2½	—
W. Yorkshire	Judge Amphlett ¹	7/6	5/-	5/9 to 6/9	2/6 to 5/-
S. Yorkshire.	Sir Edward Clarke, K.C. ¹	7/6	5/-	5/9 to 6/9	2/6 to 5/-
Cannock					
Chase	Sir Clarendon Hyde ¹	6/- to 7/-	5/-	6/3 to 6/6	4/9 to 5/4
S. Stafford .	Sir W. Lawrence, Bt. ¹	6/- to 7/-	5/-	5/- to 6/6	4/- to 5/-
Warwick . .	Sir W. Lawrence, Bt. ¹	6/- to 7/-	5/-	5/4 to 7/-	4/6
Shropshire .	B. F. Williams, K.C. ¹	6/- to 7/-	5/-	5/6 to 6/-	4/6 to 4/9
Derby . . .	Judge Lindley	7/1½ to 7/6	5/-	6/- to 7/-	4/9 to 6/2
Nottingham .	Judge Stanger, K.C.	7/6	5/-	5/6 to 7/-	5/- to 6/6
N. Wales . .	B. F. Williams, K.C. ¹	6/-	5/-	6/-	4/10 to 6/-
Somerset . .	{ Judge Austin Hon. G. Peel Ald. T. Smith ¹ }	4/11	—	{ 3/3 + per- centage }	{ 2/8 + per- centage. }
Bristol . . .	Ald. George Pearson	4/11	—		
Scotland . .	{ Sheriff Mackenzie Sir T. Mason John Burnett ¹ }	6/-	5/-	5/6 to 5/10	4/9

The 2s. minimum claimed for boys has been obtained in the majority of districts. In comparing the various rates, payments in kind, such as free coal and house-room in Durham (valued at 1s. a day), and cheap coal in South Wales, must be taken into account.

The work of the Boards has varied greatly in complexity; thus in Northumberland the only divisions are into men and boys, pieceworkers and dayworkers; while in Cumberland twenty-four, and in South Wales thirty-six, classes of workers are separately

¹ Appointed by the Board of Trade.

provided for. The district rules are in many cases very stringent; thus in Northumberland pieceworkers over 57 years of age are excluded from the Act, and one day's absence without excuse forfeits the right to the minimum for a whole fortnight; in Durham, Cumberland, Leicester, and elsewhere the minimum is not paid if not earned at the current piece-rates, unless the workman can prove that the cause was one over which he had no control. In Lancashire a workman presenting himself at the pit-bottom and finding his services not required is not entitled to the minimum; and in most districts if he is prevented from working more than part of a shift, only a corresponding proportion of the minimum is payable. Other provisions prescribe forfeiture in case of breach of colliery rules, disobedience to officials, delay in starting work, &c. In most cases provisions are made for the settlement of disputes by joint committees, generally with an outside chairman with final powers.

In some districts, notably Lancashire, the findings of the Boards appear to have given satisfaction, but elsewhere, as in South Wales, Staffordshire, and Northumberland, great discontent has been caused. It will be noticed that in a large majority of cases the minima are lower than those demanded by the schedule of February 2nd; in some parts of the Federated Districts they are actually lower than those offered by the employers on February 20th. In South Wales Lord St. Aldwyn's award of 4s. 6d. for day men led among certain sections of the men to demands for his resignation, and proposals for the break-up of the Board and for national action. Eventually, on May 14th, the Board consented to suspend its activities till the matter had been referred to a national conference of the Miners' Federation, which was to assemble in London on the 21st of May to consider the working of the Act. Towards the middle of June, however, the Board resumed operations.

On May 22nd the national conference passed a resolution regretting "that, notwithstanding the many declarations of the Prime Minister and his colleagues that the least minimum rate of wages to be fixed for adult underground workers should be a reasonable living wage, we have a number of awards which fix the minimum rates for underground workers at less than a reasonable living wage," and deciding to wait upon the Government with a view to remedying this defect. Accordingly on July 15th a deputation, unhappily no longer headed by Mr. Enoch Edwards, was received by Mr. Asquith. The men, while not prepared to condemn the Act as a complete failure, complained

among other things that the rates for day men had been fixed in most cases below the 5s. of which Mr. Asquith had expressed his own approval; that in some cases employers, by a threat of discharge, had induced elderly workmen to sign statements to the effect that they were not entitled to the minimum; that the 80 per cent. of attendances required in many districts—in some cases 100 per cent.—was excessive; and that in fixing the rates for pieceworkers the Boards did not take into account the average rates already earned. With regard to this last point, it is worth pointing out that the men do not appear to accept the interpretation placed by Mr. Buxton on his own amendment, already discussed. The Prime Minister replied that he did not feel justified in asking Parliament to amend the Act; he called attention to the substantial advances awarded under it in many cases and to the desirability of giving it a further trial.

On August 15th the conference of the Miners' Federation met at Blackpool to consider reports from the districts. Besides the complaints already mentioned, these reports laid stress on the difficulty experienced in many cases in obtaining arrears of wages due under the awards. Dissatisfaction was also expressed with the implication of the Premier that it was the duty of the Unions, and not of the Government, to see that employers did not induce men to contract out of the Act. The districts were instructed to keep the executive fully informed of further developments, with a view to summoning another Conference; but no further measures were taken.

The rest lies with the future.

D. H. ROBERTSON

THE PRINCIPLE OF LAND VALUE TAXATION.¹

IT is perhaps inevitable that professors of political economy and politicians of the market-place should approach such a controversial subject as the taxation of land values by very different avenues of thought and logic. Yet there is no pressing question of the day where want of co-operation and touch between the two elements that frame public opinion is more likely to be disastrous. While my method of argument differs from Mr. Bickerdike's in that I prefer to base myself on first principles, it is nevertheless extremely encouraging to find this form of taxation ably defended by economists on purely utilitarian grounds.

But in carrying on the discussion opened by Mr. Bickerdike's article in the March issue of *THE ECONOMIC JOURNAL*, I want to bring the other avenue into the writer's vista. I am not quite clear, and I do not think Mr. Bickerdike is quite clear, where his avenue is leading, or where he wants to go. He may want to go nowhere and direct no one; but human nature being what it is, that is improbable.

If I read him aright, however, his argument for the taxation of land values, and the one he conceives of as the politician's also, is the possible resulting increase of material prosperity. "Production is more efficient"; "there is an expectation, well founded, that the public will gain more than the landowners lose"; "the best development of urban life" is to be achieved when "towns are able to devote most of the rent of land to improving the attractions of the town." His only difficulty is "on grounds of equity" to the landlords. His aim is some conception of that indeterminable "greatest good of the greatest number," to achieve which he would commit a little injustice.

If I may speak for myself as a Land Taxer who has had some share in bringing this question into immediate English politics, I can safely say that this brand of politician has not the aims of

¹ A reply to Mr. Bickerdike's article, *ECONOMIC JOURNAL* March, 1912.

Mr. Bickerdike, and, if he had, would not try to achieve them at such a cost. It almost appears as though people who write as Mr. Bickerdike does are trying to put on what they think are modern spectacles,—or, to change the simile, are trying to come down to what they fancy is the politician's level of thought and morality. I think I prefer the honest indignation of Captain Pretymian or Lord Helmsley.

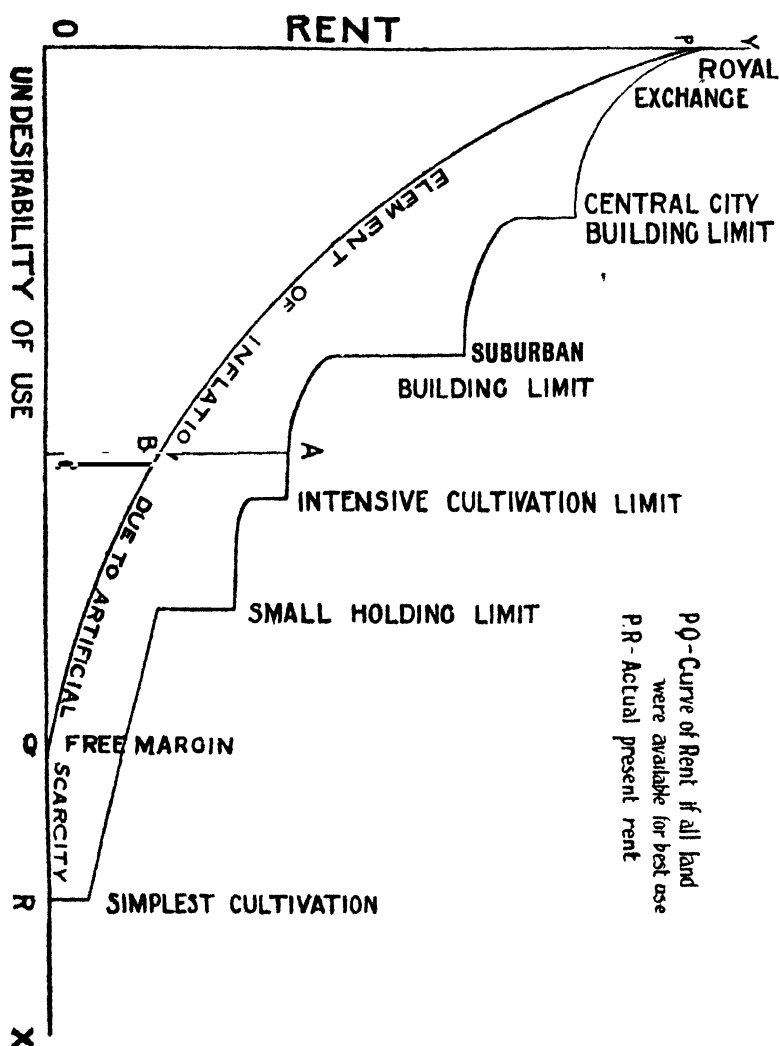
In a word, therefore, we do not seek to increase material prosperity; we do not aim at the greatest good of the greatest number; we regard that maxim as consistent with slavery and autocracy and State Socialism. Our object is to secure freedom; our method is by stopping injustice. We have a, possibly old-fashioned, prejudice in favour of the dictum of Aristotle that in the long run that which is unjust can never be expedient.

Freedom.—In our estimation men will be free when any man, or any body of men, are able to work for themselves and secure for themselves the full reward, each of his own labour. Such conditions are obviously attained where a man works on land paying no rent, rates, or taxes, with security of tenure, so that his improvements remain his own. If any land were available at the economic rent presupposed in Ricardo's law of rent, such conditions would be attained wherever a man works on land (with security and free of rates and taxes), provided always that he pays no more than the economic rent. At present no land is obtainable on such terms. No man can, at will, work so as to obtain the full reward of his labour. The absence of land obtainable at such a rent, the absence of security, the presence of rates and taxes deprive the worker of the full reward of his labour.

The free opportunity to work (whether on free land or on land at economic rent) will break down what we call (I do not know what economists call it technically) "the iron law of wages." Wages, we say, will be governed by what a man working freely for himself can get,—aping perhaps the language of economists, we say that wages will then be governed by "the marginal utility of labour."

The Ricardian law of rent in perfection involves a *gradual* slope or increase from the free margin, where rent is *nil*, up to the Royal Exchange. In practice the rent-slope ends not in a free margin, but in a wall, and every established change from one form of land culture to another involves a terrace wall. The rent demanded for the lower form of culture does not merge gradually into the rent demanded for the higher form of culture. There is no *free* margin for the higher form of culture. There is again

an artificial wall. Our system of rating and taxing assists in constricting the supply of land for every higher form of culture, as well as for the lowest form. The artificial scarcity throughout brings the curve of actual present rent far above the curve of



Ricardian economic rent. No man can get land at its proper economic rent, let alone escape rates and taxes.

The diagram given above shows the curve of present rent and of economic rent. The area intercepted between the two curves represents the element of artificial inflation due to artificial scarcity. To avoid injustice the worker wants to be at *B* paying rent *BC*.

He is at *A* paying rent *AC*. If he could get land at *B*, on demand, paying *BC* rent, he would both be free and enjoy justice.

Our present rating and taxing methods encourage the erection of terrace walls; they create artificial scarcity. We believe that the Single Tax would break down these walls and give us the Ricardian slope of rent, with its free margin where men can work in freedom.

I repeat that there would be a "free," or at least a just, margin for each form of land culture. The builder would have his "free" margin where he could get market garden land at market garden rents; the market gardener his, where he could get small-holding land at small-holding rents; the small-holder his where he could get agricultural land at ordinary farm rents. The miner, quarryman, and wood-chopper would have their free margins too. The economists may deny that the Single Tax would have this result in full; they cannot deny that it would have this result in part.

Justice.—Mr. Bickerdike believes that the repeal of the Corn Laws was justified by regard for the greatest good of the greatest number,—and hints that the landlords were robbed. It is here that we differ—the politician and the professor. Irrespective of what its results might be, the repeal of the Corn Laws was to us, and to Richard Cobden, an act of justice. The imposition of the Corn Laws gave to certain persons a privilege of value, akin to the value given to the owner of premises when they are licensed for selling beer. People bought and sold that privilege, just as they bought and sold rotten boroughs, just as they bought and sold public house licences. A privilege is very different from property. My title to a chair or a locomotive goes back to the man who made it; my title to a privilege goes back to the vote of a majority in the Houses of Parliament. If a man wants to use my locomotive he gets something he wants, and pays in effect the man who made it a price determined by the cost of reproduction. If a man wants to use my privilege, he gets nothing but a State permission, and pays me a price which is in effect a tax.

This difference between privilege and property is well known and accepted. The State did not compensate the owners of rotten boroughs in 1832; the State did not compensate the landlords in 1847; the State did not compensate the public-house owners in 1904, it arranged for them to compensate each other. These privileges which a majority of the Houses of Parliament has given are private rights to tax the community. The granting of

the privilege was unjust; its revocation was just, and not robbery.

It may be that some day there will be a protective tariff levied in this country, whereby certain protected industries will flourish. The ever-changing shareholders will enjoy a privilege, a legal right to tax the community. Will those who afterwards get the tariff reduced and the privilege diminished be acting unjustly? Further, suppose that, as in many foreign countries, the protective tariff is raised every five years; that this process continues so long that the purchaser of shares in the protected industry may well have bought in expectation of a continual intermittent increase in the tariff. Is it conceivable that it could be considered unjust to say that there should be no further rises in the tariff? Yet that in effect is Mr. Bickerdike's complaint against the Increment Duty.

So that when we advocate the alteration of our system of rating and taxation, with a view to securing the free margin, and find that the alterations involve the destruction of certain privileges, enjoyed of old time as the result of legislation, we still support the alterations. We believe that injustice consists not in the destruction of privilege, but in its continued existence.

The Method of Securing Freedom.—What are the privileges which will be destroyed? How do the politicians seek to destroy them? On these points, too, there are explanations to be made by the politicians to the political economists of the schools.

The second point must be taken first. What steps do the politicians advocate? Mr. Bickerdike concerns himself with the Increment Duty. This duty is not properly a land value tax at all. It makes land no cheaper, no easier to get; it in no way frees the margin. It has all the disadvantages of a tax partial in its application and accidental in its incidence. Its chief advocates only recommend it as a weapon to secure a "full" valuation, and, as soon as it has fulfilled that more or less useful purpose, it may well be buried without any regret on the part of even moderate land taxers. Looked at from the mere Treasury point of view, "there is no money in it." Something of the same sort may be said of the other land value duties as imposed in 1909. They were only a makeshift at first. They are only a nuisance now, and may well give place at an early date to the general annual tax asked for by the politicians.

The Land Values Group in the House of Commons which focuses political opinion on the question have a very definite programme, on which the next election will be fought if the signs

of the political weather may be judged. The Memorial, signed by 174 Liberal and Labour members and endorsed by the National Liberal Federation, asks for :—

(1) A general tax on "Full Site Value" in town and country alike; part of the proceeds to go to relieving the ratepayers of certain burdens which are national in character; part to abolish the food taxes.

(2) Power to be given to local authorities to adopt full site value as the standard of rating, instead of the annual value of land and building, *rebus sic stantibus*.

Mr. Bickerdike confines his approval, somewhat illogically, to the Local Rate on Land Values, and I will only touch on the general tax (to be spent in relief of local burdens), to say that it is necessary, if only to get round the great and obvious difficulty of boundaries. Some municipalities have within their range of taxation wide areas of suburban unbuilt-on land to whose value they and their citizens largely contribute; others have a restricted area already built over and are creating and maintaining the land values of external urban districts. It is only by a general tax that you can deal at all fairly between the two classes of municipality.

I too, however, prefer to deal with the change in the assessment of local rates, rather than with the general tax, both because it involves the complete change to single tax for local rating, and because it enables one to show exactly what are the privileges which will be destroyed. But theoretically a national tax on land values is justifiable by every argument which justifies the local rate.

The change in local rating, as recommended by the Select Committee on the Land Values Taxation (Scotland) Bill of 1906 and supported by the signatories to the Memorial, will not be an additional burden, but will afford a substitute for the present rates on improvements. The same sum total will be raised from owners and occupiers of property in any locality, the same people will pay, but their contributions will be measured by the full site value of the premises they own or occupy, instead of by the annual letting value of the hereditament *rebus sic stantibus*. Those persons whose property is now improved above the average¹ will contribute less than at present, those whose property is average will contribute the same, those whose property is not now improved up to the average will pay more. But all will be able to

¹ By "improved above the average" I mean those in which the ratio of "improvement value" to "unimproved land value" is above the average of the ratio in the case of all the hereditaments in the district.

improve their property, build, cut up into small holdings, open up minerals, &c., without being penalised for doing so. Even the man whose land is "ripe" and unbuilt on, has only to build and improve up to the average to set right his balance sheet with the community.

It is true that contributions will not be according to ability to pay. They will be measured by a juster rule, they will be levied according to benefits received.¹ They will be measured by that land value which arises not from the personal activities of the owner, but from the activities and needs of the community.

The Destruction of Privilege.—What, then, is the privilege of which landowners will be deprived? As a whole in any locality they will pay in rates no more than at present. Every individual landowner, by improving up to the average, can be sure of being no worse off than any other, and as a whole they will pay no more. One could quote good authority, the late Lord Goschen and Sir Robert Giffen among the number, to show that ultimately the incidence of all rates is upon the landlord, whether those rates be raised on land value or not.²

How, then, will the landlord suffer? What is the privilege of which this change will deprive him? It is this:—In the case of house property the present rating system, which checks the free construction of houses, will be abolished. There will be, therefore, a large increase in the supply of houses. Therefore, the rents and prices of *all* houses will fall. The same reasoning applies to all factories, to mineral royalties, to small holdings. The increase in the supply, due to the exemption from taxation, will lower the rents obtainable at present for houses already built, as well as those to be built; for mines already open as well as for those that may be opened. It will lower the prices obtainable for the product of factories and small holdings already in existence, and therefore reduce their partially protected profits or their rent.

The present rating system is, in fact, in its operation exactly

¹ All wise expenditure of the ratepayer's money results in increasing land value, whether the money be spent on a park, a tram line, a sewer, free schooling, or poor relief. Because of any of these conveniences, the users of land and houses compete more keenly, and are willing and able to pay more rent—i.e., land values are higher and more benefit is received by the landowners. This can best be seen if one contemplates the effect of the abolition of any one of these public services. If there were no poor relief, for instance, the insecurity of property would be increased and orderly labour would be reduced, the two circumstances together diminishing land value. Poor relief is a "business proposition" just as much as a sewer or a gaol.

² Professor Marshall maintains that only that part of the present rate which is proportionate to the amount of land value in the hereditament falls upon the landlord. No doubt, so far as the immediate incidence is concerned, that is the correct view.

similar to a protective tariff. It checks competition with houses, factories, or mines, that are now in use, by penalising all new competing production, and by benefiting the withholders of the land and natural resources which might be used for such production. All landowners will lose a privilege and a valuable one. They will lose the protective tariff which makes competition restricted, and which limits the free supply of land which might compete with theirs. They will lose the privilege of being helped to erect the terrace and marginal walls with which they now obstruct the smooth flow of the rent curves to the margin postulated in the Ricardian theory.

If it is unjust to deprive them of this privilege, then it was unjust to deprive them of the Corn Laws; it was unjust to allow the invention of steamships and railways to bring us cheap wheat; it was unjust to allow the free competition with our established industries of the newer industries of Germany and Belgium.

"But," say some, and I think I see signs of this idea in Mr. Bickerdike's article, "such a change as this would tax landlords out of existence. You are not merely depriving them of a protective tariff; the rate will be 20s. in the £; you are depriving them of their property." That is not so. Real estate consists of land and buildings. Real estate owners as a whole will pay no more than at present. So far as direct effect is concerned, what they lose on the swings they gain on the roundabouts. They only lose the artificial protection, the privilege of restricting the market.

This, too, is our answer to those who say that *land value* is not sufficient to meet the needed land value rate. Land value now, to-day, is land value with the amount and incidence of present rates taken into account. (If the same services were rendered by some external millionaire and no rates at all levied, land value to-day would be higher by the capitalised amount of the rate remitted.) Land values, in future, will be land values with the amount and incidence of the future land values rates taken into account, and I pre-suppose all through that the total amount of the rates levied is the same after as before the change. It is the increased supply of land available for use, for every form of land culture, that will alone reduce land value.¹

I have endeavoured to show, so far as local rating is concerned, what is the privilege we seek to destroy and how we propose to

¹ Some reservation is needed here. As the margins are freed and wages rise, men will be driven less hard to work, will probably work less hard; and there will be in consequence a smaller surplus for the monopoly owner. The surplus registers itself automatically as land value, which will accordingly diminish *pari passu* with the increase of freedom.

of which is determined on the one hand by the extent of Ignorance and on the other by the immobility of invested resources. The flow of resources into an industry or enterprise being (proximately) determined by its appropriate set of prospective net returns, the waste is shifted on to society in general, and if in the diagram "product" is substituted for "rates of return," the amount of this waste is measured by $MP'' - MP'$. But a part of the injury—the Uncertainty in the amount of return—remains, in the nature of things, with the owners of resources and is borne by them for a payment (generally positive) which enters into the return upon the marginal unit of resources.

Uncertainty is then the result of a particular form of Ignorance, and is borne for a determinate payment by a particular class of persons. It is a condition of exposure to events of which the prospective net effects compensate for the state of imperfect knowledge as to their importance and date of occurrence.

In passing to consider the nature of this disutility, it is convenient to make no attempt to find phrases sufficiently wide and precise to contain the many forms of Uncertainty, but to confine consideration to a type which is representative of that occurring in modern business conditions. A representative firm is exposed to a series of changes in its business environment; these changes may proceed from fluctuations in the value of its raw material, from variation in the confidence of its creditors or from a multitude of other causes; but in modern business conditions they may be represented in one form—an imperfectly foreseen change in the volume of its disposable resources.

Prof. J. B. Clark has pointed out that the injury of such changes arises from the condition that a sudden increase of capital to a business man is not equivalent in importance to a contraction of similar amount—"the actuarial value of the hazard . . . is determined by multiplying the fraction that expresses the hazard by the figure representing the total utility of the capital exposed to it." In considering the use of capital in business, one may, however, go behind this; the rapid variations in the marginal utility of capital in this case are not, as in its applications to the satisfaction of personal wants, directly connected with psychological conditions, but depend, it would seem, upon that rigidity of economic adjustments, that immobility of applied resources, which hinders rapid readaptation to changing conditions and prevents the business man from readily meeting heavy calls upon him or from immediately employing in his undertaking an addition to the resources at his disposal.

Business Uncertainty results, therefore, in a condition of financial insecurity and prevents the close investment of capital. Its evil is apparent in a loss of interest upon that quantity of resources which it is necessary to hold as a kind of reserve against the occurrence of events the magnitude and date of which it is impossible perfectly to foresee. Consider, for example, the Uncertainty borne by a workman in receipt of a definite annual income fluctuating about a weekly average of, say, 30s. a week. It is not possible to say at what price he will be willing to bear this Uncertainty but, if he is a rational person, it is clear that he can eliminate the evil by the provision of a reserve which will put at his disposal a steady income of something less than 30s. a week—that is to say, the loss of interest upon this necessary reserve sets a limit to the injury inflicted upon him by the irregularity of his receipts. As the return upon applied resources fluctuates more and more violently, this reserve grows in size until when the resources are exposed to the chance of total loss, it has become indefinitely large, and the conception of a reserve which would destroy the evil of Uncertainty must be replaced by the notion of a price at which the disutility will be borne. The conception does, nevertheless, give a more definite idea of the evil and of the nature of its remedies; moreover, in actual life Uncertainty is, in fact, largely met by the provision of a reserve, so that its evil to those who bear it is reduced by every method which diminishes on the one hand the amount of this reserve, and on the other the loss of interest which its provision entails.

The social machinery for dealing with Uncertainty is elaborate and extensive. Ignorance is reduced by investment in intelligence; certain kinds of change are eliminated by the institution of law and police and by other methods of prevention. Those on whom it falls may reduce its evil by dissipating its effects over a large number of capitalists—the standard instance being that of the Joint Stock Company; they may transfer it to the Speculator—the Jobber or Produce Broker; or they may, either directly or by the agency of Insurance Companies, set off one event against another and by compounding the effects, reduce, not indeed, the Uncertainty of any event, but the amount of reserve which must be held against its occurrence.

The great development of these various devices illustrates the social importance of economic Uncertainty; but, in spite of their great scope and variety, there remains with business men a burden of financial insecurity the reality of which is suggested by the very large reserve funds which they still find it necessary to hold.

It is with the methods of reducing this residual insecurity that this paper is concerned.

The results may be briefly recapitulated. Given the rate of social change, the extent of Ignorance, and the various social devices enumerated but not discussed, the amount of Uncertainty depends upon the degree of immobility of resources. The typical condition has been represented as a sudden change in the quantity of resources disposable by a business man; an addition to his capital cannot easily be employed, and a subtraction cannot readily be met because of the fixity of his adjustments; Uncertainty results, therefore, in financial insecurity and inflicts on him an injury which may be conceived as a loss of interest upon a reserve adequate to eliminate its effects. It is evident that the amount of this reserve, or at any rate the loss which its provision entails, may be reduced in two ways—either by increasing the availability of his resources, whether applied in his own or invested in some other undertaking; or by the presence of organisations upon which may be shifted the incidence of these sudden changes.

Before proceeding to discuss these two methods, it is necessary first to establish the general proposition that the imperfect availability of resources involves a cost, and therefore implies a payment to the owners of those resources.

This proposition is evidently true in the particular case where a business man applies capital in his own undertaking. Immobility of resources being a cause of Uncertainty, it is to be expected that the most highly specialised capital will, *ceteris paribus*, yield the largest net returns; that is to say, in such cases Immobility involves a cost, for it increases financial insecurity and therefore the amount of reserve which needs to be held against it. But in attempting to extend the proposition to that capital which a business man invests in undertakings other than his own, one is met by the difficulty that their imperfect availability evidently does not increase the Uncertainty falling upon him. This imperfect availability does, however, *lessen his power to meet* Uncertainty, and thereby increases his financial insecurity. The argument which follows is directed to show generally that Immobility implies financial insecurity, which appears as a measurable cost in the Supply of capital; it considers, further, two methods by which this cost is diminished.

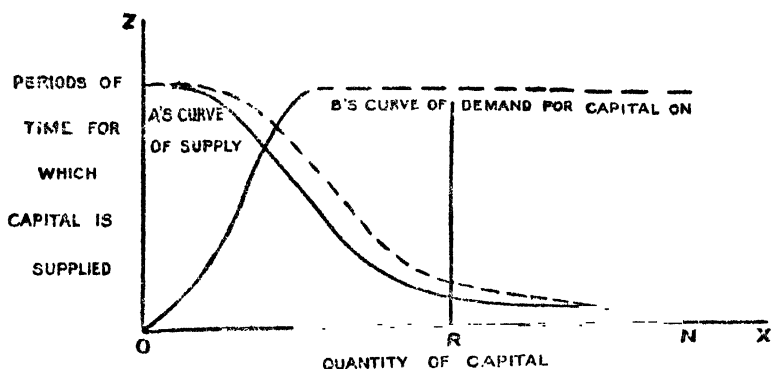
In order to simplify the argument, let it be supposed that the supply curve for the aggregate of capital is, so to speak, subdivided into a large number of curves similar in shape, so that

A, a person in possession of such a curve, is in this sense representative of the competitive supply. Let B similarly represent the demand.

If A supplies capital directly to B, the terms of the contract between them may vary between two extremes in which the maximum advantage is thrown on one side or the other. Neglecting minor considerations, this means that in the one case the period of supply depends wholly upon the will of A, its type is a deposit with a bank; in the other the time of repayment rests entirely with B, as in an issue of debentures redeemable at will.

The former contract throws the whole burden of financial insecurity upon B; it may therefore be taken as a basis from which may be measured the Insecurity accruing to A from any variation in its terms.

Let A's supply ON be represented by a curve showing the



various maximum lengths of time at which he will be willing to offer the different parts of his available resources; a single rate of interest being given, Risk and the costs of administration being neglected. And let B's curve be a similar analysis of his total demand showing the minimum periods at which the various quantities will be demanded at that rate of interest.

It seems evident that A will be unwilling to supply more than a small proportion of his available resources for long periods, and that B's demand, arising mainly from such uses of capital as the financing of railways and wars, will be one almost entirely for long periods. Moreover, neither curve is likely to show much elasticity, that is, much change of form in response to variations in the rate of interest; for, on the one hand, A's insecurity will increase fast as the period of supply lengthens and, on the other, the close correlation of the long and short processes of production will narrowly limit any great extension of the latter. If the rate

of interest is now allowed to vary with the period of supply, A's curve may assume the second position, when the additional interest represents the marginal payment for the burden of Insecurity falling on him.

It appears, then, that in the direct supply of capital from A to B there would be a series of equilibria corresponding to the different periods of supply; a comparatively small amount *OR* would be marketed at rates of interest rising sharply as the period lengthened; the burden of Insecurity would hold back the greater part of loanable capital, and its extensive use in durable production processes would be impossible.

Insecurity, considered as a deterrent to the supply of capital, is therefore an element of the highest importance; any diminution in its amount increases the flow of capital into productive uses and swells the Dividend. The organisations by which it is diminished are various in form but similar in their principle of operation; the method consists essentially in the creation of a market.

The banks in effect make such a market for their customers by an organisation which sets off withdrawals against lodgments; by its means they have entirely removed from their depositors that Insecurity which would normally attach to loans yielding a rate of interest equal to that paid them by their bankers.

The importance of the Stock Exchange in this respect is greater still. In most cases the securities dealt in on this market are representative of capital supplied for very long, even indefinite, periods. Probably only a small fraction of that capital would have been forthcoming were it not that the Insecurity of Supply has been reduced by the ease with which the capital may be recovered, not indeed from the party to whom it was originally supplied, but from some other party desirous of investment.

In England, Germany, and France the rate at which sound bills are discounted is regularly lower by $\frac{1}{2}$ to 1 per cent. than the rate at which loans will be made for similar periods against equally good security. This difference is evidently due to the marketability of bills, that is, to the greater availability of resources invested in them, it gives a precise measure of the difference in Insecurity.

These facilities for the recovery of resources apply to so large a part of the total supply that in the gaps where no organisation exists for the purpose—such as solicitors' mortgages—long loans can be made with that capital which people prefer to supply for considerable periods of time, so that over the whole range of

periods only small differences of rate accompany the different degrees in which resources are available. And, on the assumption that the various markets are closely connected, even that part of capital which is by preference supplied for long periods will receive the additional rate.

If the net rate of interest is taken to be the price paid for the pure Supply of capital for periods terminable at the will of its owner, its type will be the rate paid on deposits at call by a bank of undoubted reputation. Pass from this to an investment in a Treasury Bill. The net rate is increased by two amounts. The first sets off the costs of the market, a part of which is the marginal expense of reducing the element of Insecurity to a very small amount; the second is a payment for this residual amount which arises from those fluctuations in the value of the Bill due not to change of Risk, but merely to the varying balance of desire to invest or realise. This second addition to the net rate of interest must increase with the remoteness of the date at which the security becomes repayable, and may become considerable in long debentures or Consols. Mortgages on houses and land may often in England have no organised market. Capital so supplied consists of resources for which a long investment is preferred. But it is evident that their rate of yield cannot fall below this composite rate upon investments equivalent in other respects. In the final case of capital supplied to Business Power upon ordinary or preference shares, the condition is essentially the same; the costs of Supply will include a charge for Insecurity borne and another for that part of the work of brokers and jobbers which serves to diminish it.

To sum up. It has been argued that the demand for capital arises mainly from its uses for long periods, while the various lengths of time for which Supply is made are rigidly limited by the Insecurity which results when resources are made unavailable. In the simple conditions of direct supply the extensive use of such capital in durable processes would be impossible.

Organisations have arisen which reduce the disutilities of Supply, among which is the element of Insecurity. Every supply of capital is, therefore, laden with charges, in excess of the net rate of interest, and consisting of the marginal supply price of the services of these organisations together with payments for the residual disutilities. There being, in simple conditions, an excess of short supply of capital, it follows that the whole of the capital now supplied for long periods will obtain a rate which includes the additional payment for Insecurity, even though a

part of that supply involves no Insecurity and has no organisation to reduce it.

The costs of Insecurity are at a maximum in the case of capital invested in an irredeemable Security with a narrow market; they decline as the period of Supply shortens and as the market improves until, in a bank deposit, they have fallen practically to zero. If the sum be transferred from deposit to current account the income of net interest is exchanged for a positive return of Convenience and Security derived from the services of money; its marginal yield being equivalent to the interest foregone.

The same principle which holds for the individual applies also to the distribution effected by intermediaries. Bankers will not sell the Use of Capital at different net rates in the same competitive market; they must normally obtain the same marginal net yield upon each class of their loans. The fact that the borrower "at call" is subject to much risk (or Insecurity) does not affect the price at which sellers are willing to supply their services; this price must always be the sum of the general market rates for Waiting and the services associated with it; the marginal yield of Convenience and Security obtained by bankers from their loans to the Bank of England is equivalent to the average net rate upon their call loans, and this is equal to the net rate of interest.

It follows that if the loans of bankers and the investments of private persons yield the same net return, the banks' mean deposit rate should be identical with the average net yield upon their "money at call." For the six years 1900-6 the average deposit and call rates were 2.0 and 2.6, respectively, showing a difference of .6 per cent. going to the banks as payment for their Trouble and Uncertainty. Some idea of the adequacy of this difference is given by a comparison of the average margin of the Discount houses during the same period. Their average deposit rate was 2.4, while the rate on 60-day bills was 3.02, showing a rate of payment of .6 per cent. for work similar to that of the banks in the short loan market.

So close an agreement between these figures is no doubt largely accidental, for there are several small errors of which no account has been taken. But the result of the comparison is harmonious with the argument that financial insecurity is a disutility susceptible of a money measure, and that its price may be deducted from the actual rate of interest in order to yield the net rate in the sense defined.

There is a possible objection to be met. It may be said that

Insecurity as an element in the costs of production of capital is exceptional in character, inasmuch as the work of those organisations which have reduced its amount has resulted in an alteration of the *net* rate of interest. But evidently this effect is not confined to changes in Insecurity and does not, therefore, make that element peculiar. If, for instance, an improvement in business morality reduced the amount of Uncertainty (the personal Risks) in unsecured loans, the same result—a change in the net rate—would tend to follow. In both cases the essential circumstance in the reduction of Insecurity or Uncertainty is that a larger part of the demand for capital has become effective, so that the net rate of interest in whichever way defined inevitably tends to change.

The general conclusion, therefore, with regard to capital supplied for considerable periods is that after allowance has been made for Trouble and Uncertainty the price paid for its use contains a payment for Insecurity arising from the imperfect availability of the capital so supplied; this payment has been very greatly reduced by the organisations engaged in the marketing of capital; its amount is given by the excess of the net rate of interest in its more usual sense over the net rate upon capital supplied for periods terminable at the will of its owner.

Apply this to the circumstances of that typical form of Uncertainty where a business undertaking is exposed to unforeseen changes in the volume of its resources and meets this condition by the provision of a reserve. The work of the organisations just discussed results in lessening the *cost* of this reserve—a series of investments is substituted for a stock of cash. The cost of Uncertainty to the business man is therefore reduced by the amount of this increased return upon resources held against financial emergency.

Turn now from the method of reducing the *cost* of this reserve to those which diminish its *amount*. Financial insecurity arises in a large measure not from general causes, but from events peculiar to the individual; it is, therefore, amenable to treatment by the method of insurance. If the individual variations in the volume of disposable resources can be set off against one another by appropriate organisations, the aggregate reserve held against them may be very greatly diminished.

This work clearly forms a part of the operations of the organisations for marketing capital—in particular that of the banking system. The service of the Bank of England in a crisis is typical of that of the other banks in the

daily emergencies of business. The English system, by its power to vary the volume of Command over Capital and by the great ease with which it can effect its rapid redistribution, is particularly adapted to meet the demands for capital arising from business emergencies. Its implicit undertaking to supply capital on demand corresponds to the explicit contract of an insurance company to bear the risks arising from certain defined events; in effect, financial insecurity is shifted from business men and concentrated upon banks. The great importance which companies and governments attach to their "credit," that is, their power to borrow readily, illustrates the importance of this work, and suggests the great economies which the banks effect in the social provision against Uncertainty.

The economy effected by the banking system owing to its ability to lend on demand depends essentially upon the principle of insurance; for it consists of compounding events and thereby reducing the reserve held against their occurrence. But there is a peculiarity in its method which, although not strictly relevant to the argument, is perhaps worth notice. By this method "premiums" are paid only when "benefit" has been received and in proportion to that benefit; hence there exists a complete harmony of interest between "assured" and "assurer," and there remains no tendency to an increase of the evil against which insurance is effected; for instance, Unemployment or Sick Insurance effected by this method would have no tendency to diminish the amount of idleness or sickness—a condition in sharp contrast to that resulting from the present system.

The conclusions of this general argument may be briefly summarised. A part of the injury occasioned by ignorance of future change falls on a particular class of persons, the owners of resources, and is borne by them in exchange for a payment which enters into the return upon the marginal unit of applied resources. This injury, consisting in a state of Uncertainty, depends, *ceteris paribus*, upon the immobility of invested resources, and results in the typical case in a condition of financial insecurity. Imperfect availability of resources implies, therefore, a state of financial insecurity, and this Insecurity is a measurable disutility which enters into the cost of production of capital, and may be eliminated to give a net rate of interest in the sense defined. It is met in part by various methods of prevention and transfer, but there remains a residue of injury of which may be regarded as a loss of interest upon a reserve adequate to eliminate it. This residual Insecurity is dealt with by the organisations for marketing capital.

In their relations to supply they raise the net rate of interest (in the sense used in this paper), thereby reducing the loss upon this reserve ; in their relation to Demand they diminish its amount by a readiness to lend, which, in effect, is equivalent to an insurance against financial emergency. The social importance of this part of this work in reducing the evil of Uncertainty is given by its effect in permitting the closer investment of capital, thereby increasing its productivity and swelling the National Dividend.

F. LAVINGTON

THE SENSITIVENESS OF THE MODERN SEAPORT.

OUR seaports have been very much in the public eye of late. Not only were the labour disputes of the summer of 1911, and again more recently, with their disturbing influences on trade, a means of emphasising the importance of the ports in our economic system, but activity in the direction of improvement is becoming a more and more notable feature of port history. London has been a subject of continuous inquiry and discussion for a decade, and it was announced in 1911 that an extensive scheme is to be carried out at great cost by the new authority. Again, the opening of the Royal Edward Dock at Bristol was the scene of one of the last public functions attended by King Edward VII. All this points to unsettled conditions which make it necessary for the authorities to be always carrying out new works or revising existing systems in order that the ports they control may maintain their position among their neighbours. This is new. Little more than a century ago there was to be found no such feverish anxiety. Historians, especially those of the economic school, have devoted much time to sifting the economic grievances which led to the American War of Independence, and in the course of their inquiries have demonstrated that it was no hardship to insist that colonial produce should come to England, because its *natural* destination was London. Thus, although evidence given before a committee of inquiry in 1796 revealed an almost incredible amount of congestion in the Thames,¹ there was hardly any fear expressed that London would lose her trade to other ports offering better conditions. Now, a century later, ten years of attention has been given to the problem of preventing London from falling behind certain Continental ports. The conditions which have produced this result in London prevail everywhere. The trade of a port is now a far more sensitive thing, a thing far more danger-

¹ It was stated that ships were sometimes a week in getting round the bend of the river from Blackwall to Limehouse.

ous to tamper with or to throw into even temporary disorder, than it was at the opening of the nineteenth century. A short survey of the history of the period will in a large measure explain the change.

The most obvious characteristic of the history of seaports during the last century, and especially during the last sixty years, has been the enormous development of engineering works. At the beginning of the period docks were few in number, but at the present day a port cannot meet the demands of shipping unless elaborate docks and quays have been built to supplement its natural advantages. The growth in the size of steamers has been extraordinarily rapid, and the whole modern tendency is to increase the capacity of vessels, even at some slight expense of speed, because the larger the vessel the greater the economy of working her. It followed from these changes that many vessels could no longer be accommodated in the open harbour or estuary, since there was not enough water at low tide to float them and they were too large to be allowed to ground with safety. Furthermore, the great increase in the number of vessels made the natural waters very congested. The result was a great increase in dock and quay construction and in dredging.

Mere accommodation, however, for the vessels themselves has not been the only demand on the ports during the period. Steam-driven vessels, which are now by far the more important part of the mercantile marine, travel with great regularity, and if they are regular traders¹ they expect the port authorities to be prepared to give them facilities for quick dispatch on their arrival. The larger the vessel the more is the expense of labour and maintenance, and the more pressing is the question of rapid dispatch. The cost to the shipowner alone of keeping a large vessel waiting may easily reach £100 per day.² This demand for quick dispatch has necessitated great outlay on machinery, warehouse conveniences, dock railways, and engineering works generally. It has also made dock organisation an acute question, and has led in most ports to reforms in the administration. The statistics and other particulars given below give some suggestion of the development of shipping and the magnitude of the engineering work of the half-century ending with 1900.

¹ In 1900, of the tonnage of shipping discharging at the London and India Dock Company's docks, 83 per cent. belonged to regular lines, the other 17 per cent. only being "tramp" tonnage (*R. C. on Pt. of Lond.* Qn. 6900).

² *R. Com. on Pt. of Lond.* Qn. 4879.

I.—*Increase in Proportion of Shipping Propelled by Steam, Increase in Amount of Shipping, and Increase in size of Ships.*

(Condensed from *Royal Com. on Pt. of Lond.* Appendix to Minutes,
Table 9, ninth day.)

Number of vessels owned by United Kingdom, 1860 to 1899.

Year	Steamers.					Sailing Vessels				
	Less than 1,000 tons.	1,000 to 2,000 tons	2,000 to 3,000 tons	Over 3,000 tons	Total.	Less than 1,000 tons.	1,000 to 2,000 tons.	2,000 to 3,000 tons.	Over 3,000 tons.	Total.
1860	351	91	4	1	447	6,444	420	6	—	6,876
1870	669	236	28	2	935	5,793	953	11	—	6,757
1880	1,339	813	131	10	2,293	3,440	1,066	12	—	4,518
1890	1,296	1,885	369	51	3,601	1,185	959	149	2	2,295
1899	707	1,850	806	302 ¹	3,665	325	713	193	2	1,236

II.—*Increase of Engineering Works at three typical English Ports during the last Sixty Years.*

LONDON.—*Docks existing in 1850.*—East and West India, London, St. Katherine, and Surrey Commercial (since extended).

Docks opened since 1850.—Royal Victoria (1855), Millwall (1868), South West India (1870), Royal Albert (1880), Tilbury (1886).

Water area of docks.—1802, 62½ acres; 1851, 228½ acres; 1900, 631 acres.

BRISTOL.—*Docks existing in 1850.*—City docks only (Old River Course adapted).

Docks opened since 1850.—Avonmouth (1877), Portishead (1880), and Royal Edward (1908).

GLYDE NAVIGATION (GLASGOW).—No docks in 1850.

Docks opened since 1850.—Kingston (1867), Queen's Dock (part in 1877 and rest in 1880), Prince's (first portion in 1892, rest by 1900).

Quays in river.—11,000 yards built since 1860.

[This table does not include deepening of approaches, or "private" docks.]

Table II. shows clearly that in three typical British ports extensive dock-construction and equipment has been a very important feature of their history since 1850, whereas the work done in this direction before that date had been little. This is true of ports generally.

The demand has not been only for additional accommodation. Changes in ships and trade have also made necessary a continual extension and improvement in existing works. The draft of vessels has steadily increased, and with this change has come a need for the deepening of docks and approaches. Many steamers in the American and other "all-ocean" routes now require over

¹ Made up as follows: 3,000 to 3,500 tons, 134; 3,500 to 4,000, 70; over 4,000, 98.

30 ft. of water, and the demands of many of the Eastern lines will increase if the Suez Canal is deepened. The greater length of ships has called for longer and longer locks, and has set a high value on extensive water area in docks, which facilitates the berthing and unberthing of large vessels. During the period there have been new developments in trade which require special machinery and accommodation at the docks. Of this the grain and meat trades afford important examples. The former now comes largely loose (not in bags) in the vessel's hold and is often dealt with by hoppers or suction apparatus, by which it is transferred from the hold to granaries reserved for its accommodation. An interesting example of such work is to be seen in the new Royal Edward Dock at Bristol, where a large granary, erected over a hundred yards from the quay, is fed from the vessel by subterranean travelling belts. Indeed, by the most modern arrangements, the grain need not be touched by hand from the time it leaves the hold to the time it is placed in sacks on the merchants' waggons. The growth of the import of frozen and chilled meat has necessitated the provision of cold storage buildings at all the principal ports.

This increase of work has been an important agent in bringing about another great feature of recent seaport history, the ever-increasing keenness of competition between ports. The increased facilities for the transport of commodities and for rapid commercial transactions over great distances, that is to say, the railway, the steamship, and the telegraph, have totally altered the nature of the hinterlands of the world's ports. It is conceivable that, with modern methods of inland transport, any large British port might supplant any other by giving facilities so far in advance of those offered by its rival as to compensate for heavier railway charges. Indeed, this has taken place to some extent—if not for the whole country, at least for a large section of it; for Southampton, Harwich, the Humber ports, and Bristol are all now regarded as in some degree competitors of London. It would hardly have been possible a hundred years ago to have landed goods at Hull for the same market as was served by Southampton. The deplorable state of the roads would have limited the hinterlands of both to quite small areas whose borders could never have met at London or anywhere else. Only a port of the very first magnitude, possessing a great warehousing system where the products of all the world came for storage—a port such as London then was—could hope to serve a wide market. Now it is not so.

These relations between English ports serving the interior of

England have their exact parallel in the relations of the great European ports serving Europe. It is no longer beyond the bounds of imagination that goods consigned to an English market should be landed at Hamburg, or that goods destined for Germany should be discharged at London. Geographically, the whole of the Narrow Seas may be regarded as one great harbour for Western Europe, with a broad entrance between Ireland and Brittany looking south-westwards across the Atlantic.¹ The various ports round this "harbour" will, therefore, inevitably come into competition if there is an efficient "ferry" service. There are now many lines of small steamers providing such a service, while control of the movements of the merchandise is facilitated by the telegraph and telephone. The possibility has, indeed, been seriously put forward² that the trade of London might in time become a mere "coasting" trade, a trade engaging none of the largest vessels, since these would find it more convenient to discharge and load entirely at some port on the Continental side.

There is then, both among our own ports and between all the first-rate ports of Western Europe, a growing spirit of rivalry, and it is because it plays so important a part in this development that what may be called the engineering aspect of port history has been discussed at some length. Ultimately the power of two ports to compete must rest on some equality in the facilities they offer to trade. It is due to the demand for engineering works that this equality is now so much more nearly attained than in the past. A port triumphed of old by virtue of its natural advantages, which provided accommodation for more important shipping than its neighbours could receive; now none of our ports can by means of its natural advantages alone provide accommodation for the largest ships. All require considerable outlay on dredging, quays, docks, and so on. The demands of modern shipping, by exceeding the natural facilities of the ports, have tended to lessen the practical differences between them. In any case a large amount of permanent plant, a considerable engineering staff, and a more or less elaborate administrative staff are needed, and if one port requires to go farther than another in its improvements it is at least probable that that extra work may be done under conditions of increasing returns.

The position may be expressed somewhat differently by saying that increased competition between ports is largely due to a change in the weight and nature of the geographical factor. The

¹ Mackinder, *Britain and the British Seas*, pp. 19-20.

² Mr. Douglas Owen, *R. Com. on Pt. of Lond.* Qns. 5153-4.

traditional geographical factors of a good harbour, and good natural communications behind it, are no longer the paramount agents in the production of a great port. A deep harbour is not so great an asset if it has to be dredged in spite of its depth; for when capital outlay is considered, it may not cost much more to obtain the depth in another harbour naturally shallower. In the case of the Clyde it has been found profitable to convert five miles of river containing many shoals¹ into a channel capable of taking large ocean-going vessels, the amount of deepening having varied from 20 ft. to 29 ft. A factor which has become as important as depth is the variation in depth, for on the extent of the rise and fall of the tide depends the choice between the construction of open basins, or even river quays, and docks entered through locks. The open basin system scores both in regard to expense and dispatch.

These points may be briefly illustrated by a few specific examples of the natural advantages and disadvantages of ports in relation to present-day requirements. At London, in spite of the size of the estuary, extensive dredging has been necessary, and such dredging is still necessary to keep pace with silting, while the turbid state of the water causes deposits in the docks, the removal of which costs many thousands of pounds every year. This is vastly different from the position in 1800, when, except for a timber dock which was the nucleus of the Surrey Commercial Docks and a small private one, there were no docks at London, and all the shipping could lie in the river. The rise and fall in the tide at London is such that all the docks are entered through locks. At Bristol the approach is deep, but the rise and fall in the tide is very great, so that the lock to the new Royal Edward Dock has a depth on the outer sill at mean spring tides of no less than 46 ft. At Liverpool the docks have locks guarded by a sea-wall. The artificial nature of the Port of Glasgow has already been described; the docks are, however, without locks. Turning to the Continental ports, Hamburg has to provide no locks for its docks, but has great difficulties in regard to the approaches. The port is seventy miles up the Elbe, and the biggest boats have to lighten before they can reach the docks, while in the winter the ice is a very serious drawback. Antwerp, for want of room to build docks, has constructed expensive riverside quays. A recent extension of the boundaries of the town has, however, made possible a most elaborate scheme of dock extension and river

¹ Originally the depth on some shoals at low spring tide varied from 15" to 18" (*Pt. of Lond. Com.* Qn. 5009).

improvement.¹ Everywhere we find the natural advantages of the harbour quite inadequate to determine the destiny of the port.

A further important modification is connected with administration. In some cases, such as Rotterdam and Antwerp, a large part of the responsibility for the port falls on the State, and where the State exchequer can be drawn upon it is much easier to carry out expensive works.

Ports are not handicapped in proportion to the extent of the improvements required, hence there is an increase in the number of ports offering similar advantages, and an increase in competition. The *weight* of the geographical factor has changed. It is no longer the paramount factor, for equipment, organisation, and administration have grown with the growth of competition. And the *nature* of the geographical factor has changed. It has become a wider thing. The geographical position is not sufficient if it simply provides easy communication with a localised hinterland; it must offer opportunities for the development of a hinterland of Continental magnitude. The hinterlands of the greatest European ports have so increased that they tend to become identical, each covering the whole of Europe. Any one of them can receive goods from the ends of the earth for any part of Europe, or collect goods from any part of Europe for dispatch to the ends of the earth. Hamburg, Rotterdam, Antwerp, London are, indeed, in a degree never before equalled, all world-ports—*Welthäfen*—and are therefore in the keenest competition.

These being the causes of modern competition between ports, what are the evidences of that competition, and what indication do they give of its intensity? The evidence is to be found in that close scrutiny and careful comparison of the methods of ports, in the repeated overhauling of their administrative constitutions which characterise the ports to-day.

The making of a new dock here, and the provision of a piece of specialised machinery there, have in many cases proved insufficient, and a wider outlook has been found necessary, so that a feature of the most recent history of seaports is the execution of schemes of a general nature which are based on a broad general examination of the port and its approaches, and which by their extent warrant consideration apart from the slower progress of the period immediately preceding. Indeed, the present century has already taken the character of a new stage in port develop-

¹ See pp. 419, 420, *infra*.

ment, since it has given birth to so many extensive schemes of improvement, necessarily preceded in some cases by a co-ordination of the administration of the port. These things indicate the keenness of competition and the sensitiveness of the trade, no less than the growing nature of the demands of shipping.

London is a most striking example. In 1800 the first great dock company was coming into being. The provisions made in the river, under the rule of the Corporation of London, were no longer sufficient, and the West India Docks were being built. Shortly afterwards the London Docks, the East India Docks, the St. Katherine Docks, and the Millwall Docks were built, each by an independent company. After a long series of reconstructions and amalgamations, the London and India Docks Joint Committee was constituted in 1888, the union being perfected in the London and India Docks Company in 1900, and up to the constitution of the Port of London Authority held all the public docks on the north side of the river, except the Millwall Dock. While these changes were going on in the administration of the docks, changes still more marked took place in the administration of the port. London both as town and as port requires the Thames, and as both town and port developed, so both municipal authorities and port authorities multiplied and shared the administration of the river. In 1836 the matter was brought under review by a Select Committee of the House of Commons, which reported on the conflicting jurisdiction of the Admiralty, the Trinity House, and the City Corporation, and advocated a single *ad hoc* authority for the port. This ideal was not realised, but in 1857 the greater part of the work was given to the Thames Conservancy, then created for the purpose. The constitution of the Conservancy was revised no less than four times before the Port of London Authority took over its work in the port.¹

But it is in the most recent inquiries that the pressure of competition has been most evidenced. The witnesses before the Royal Commission of 1900-2 left no consideration untouched that might bear on the prosperity of the port. The efficiency of the dock companies; the multiplication of authorities; the efficiency of the dredging of the river and the possibilities of extending it, with the cost of such extension; the suitability of the lighterage system, which enabled so much carriage to be effected by the flow of the tide alone, but yet caused so much delay and called for so much dredging in the docks. The question of the dearness or cheapness of the port as compared with others was attacked time

¹ *R. Com. on Pt. of Lond.* Qns. 3171-9.

£7,500,000, but this does not include the construction of the docks, for which the town of Antwerp is responsible. These will, it is expected, cost another £7,000,000. Part of the scheme, including the first two of nine docks and part of the "canal dock," has already been put in hand.

There is a further scheme in regard to the port of Antwerp which, although not yet adopted, has been long under consideration. It is proposed to shorten the approach to the town and to avoid the awkward turns in the river by cutting a new channel, converting the old one into a dock of 1,457 acres. This project, known as the "Grande Coupure," after being almost abandoned owing to alleged engineering difficulties, has now received the favourable judgment of a commission appointed to examine the proposals, so that it is possible that the bold idea of diverting the Scheldt will yet be adopted. In Antwerp there is, then, a scheme actually in execution which will cost, like the London scheme, fourteen millions of pounds, while in addition there is the possibility of the "Grande Coupure" being effected.¹

All this points to growing demands on the ports, with the most strenuous efforts on the part of each to keep to the front in meeting those demands. The continual discussion of the systems in vogue, the repeated changes and the great expenditure on works, all indicate the keenness of this competition. Where competition is so great, a very little thing may change the status of a competitor. Labour troubles such as those of last summer must tell heavily against the ports they affect. Their effects last after the struggles are over; there was congestion and consequent delay at our ports as a result of disputes several months after their conclusion. Delay is the greatest crime of which a port can be guilty. It is worse in the eyes of the shipowner than heavy dues. It would be exaggeration to suggest that a single labour dispute at London endangers the very life of the port, but a series of hindrances to the trade must seriously handicap any port under present-day conditions, especially when that port has to fight against ports heavily subsidised directly or indirectly by the State, as are many of the Continental ports. The question of grants in aid to some of our port authorities may become a very important one in the near future, especially in view of the extensive aid of that nature given to our Continental competitors, as, for instance, in the cases just described of Rotterdam and Antwerp.

F. A. HOWE

¹ *Diplomatic and Consular Reports*, Miscellaneous Series, No. 640; Annual Series Nos. 3752, 3968, 4182.

WHITE AUSTRALIA: A STUDY OF AUSTRALIAN VITAL STATISTICS.

A QUESTION upon which somewhat diverse opinions have been expressed is whether the British race settled in Australia has shown any definite signs of decreasing vigour and vitality, more particularly in connection with the occupation of those portions of the Australian continent which lie within sub-tropical and tropical limits. Whilst it may be admitted by many that the section of the population in occupation of that fringe of the continent which embraces the Southern coast regions may have as fair prospects of health and longevity as had their forebears in the United Kingdom, yet a somewhat pessimistic tone has prevailed in discussions as to the possibility, outside these limits, of the British race successfully colonising and developing the vast areas of virtually unoccupied territory lying to the northward of the continent, and embracing Northern Queensland, the Northern Territory (which has been wholly taken over by the Australian Commonwealth from the State of South Australia), and the unsettled and northerly portions of the State of Western Australia. It has indeed been asserted by some that, even in the settled areas, children, both of whose parents were born in Australia, exhibit palpable signs of deterioration from the physical condition of the first immigrants, by possessing less vigour of frame and less lung capacity, with a diminished inclination to face the usual privations of life outside the settled areas; and that the disproportionate growth of the town populations is due to this, whilst in many directions the country is still either unoccupied or only utilised for sheep-breeding or cattle-raising, or in large areas for wheat growing—industries for which comparatively little manual labour is permanently required. Others, again, refer to the ancient aboriginal inhabitants of Australia, with their low level of development, as evidence of a country permanently not of the first grade for human occupation, and to their speedy dis-

appearance as a feature only to be anticipated from existing climatic and geographical peculiarities. A Victorian writer, Dr. Buttner, may be quoted as having stated that "were it possible to cut the Australian continent off from the rest of the world for a few centuries, he is convinced that not a single descendant of its four million white inhabitants would be living. The race would have become extinct. . . . Our Australian-born population is, so to speak, an exotic one, which, in order to preserve its original vigour of physique and mental stamina, will require an influx of the European races from which it has sprung."¹

These Australian-born descendants of European stock are, there is medical testimony to show,² predominantly a dark-complexioned and dark-haired people, soft voiced, with eyes either grey or dark brown, with heavy eyebrows and eyelashes, and keen senses of seeing and hearing; rather taller than the average European, thin, lithe, and muscular in habit, great meat-eaters and tea-drinkers, living at high pressure with but a small reserve of energy, whose boy- and girlhood is much shorter than that of colder climates, and who may, perhaps, arrive at old age before the time at which their ancestors did. As regards diseases, in childhood rickets is almost unknown, owing to abundance of fresh air, sunlight, and good food with little overcrowding; in later life bronchitis and winter coughs are rare, dysentery uncommon, whilst there is an absence of cholera, typhus fever, and small-pox, and pulmonary tuberculosis is only half as prevalent as in the mother country. On the other hand, there is a prevalence of hydatids, anæmia (partly due, perhaps, to heat in summer), post-nasal growths, hæmorrhoids (partly of climatic origin from a tendency to constipation), with dengue fever in Queensland and malarial fever in certain coastal areas of the northern portion of the continent, whilst sarcoma and carcinoma are as common as in Europe.

The truth of the axiom "that the physiological functions of most persons who quit their native land and settle in a wholly

¹ With regard to the net increase of population in the Commonwealth by immigration, it may be mentioned that

between 1881 and 1891 the net increase was 373,754 persons					
"	1891	"	1900	"	26,515
"	"	"	"	"	"
"	and in the year	"	1910	"	37,547
"	"	"	"	"	"

² Vide Dr. R. Humphrey Martin's Presidential Address, June, 1900, before South Australian Branch of British Medical Association, *Australian Medical Gazette*, Vol. 19; also paper by Mr. D. Carment, F.I.A., *Transactions of Second International Congress of Actuaries*, 1896, on the "Rates of Mortality in Australia and New Zealand."

different region, must undergo a considerable change if new conditions are not to have injurious effects upon them," may be considered in the light of the facts observed in respect of the Australian born.

Before considering the evidence of virility afforded by vital statistics, it is essential to bear in mind the geographical conditions, climate, and rainfall of the Continent. One of the main peculiarities of the Australian climate is the variable rainfall, and the vicissitudes of the seasons are such as to preclude, up to the present, any very definite expression of uniform and widely-based periodicity.

Hence the more rapid progress in those areas usually favoured with adequate rainfall and suitable for agricultural pursuits. The principal cities of Sydney and Melbourne have an average rainfall of 48.28 in. and 26.15 in. respectively, the populations in 1911 being 637,800 and 591,800 respectively. Tropical and sub-tropical Australia, dominated by monsoonal rainfall, embraces an area of about 5/13ths of the whole Commonwealth, and includes nearly one-half of the area of Queensland and the Northern Territory, and the portion of Western Australia north of the Tropic of Capricorn. Whilst the coastal rainfall is often abundant, and floods periodically occur, the precipitation in the interior diminishes in proportion to the distance from the sea coasts. In the driest portion of Western Australia the average rainfall varies from 10 to 12 in. per annum, whilst in the Lake Eyre district of South Australia the annual average is but 5 in. On the other hand, Geraldton, on the north-east coast of Queensland, has an average rainfall, over a period of 23 years, of 147½ in., and at Mt. Lyell, in Tasmania, the average is almost 116 in. But even in the tropical North of Australia the winter temperature often falls below 40° Fahr., and a sub-tropical climate is experienced, the rainfall being practically confined to the wet season, December to April, whilst the great elevated tablelands with more invigorating temperatures are very suitable for grazing purposes. There are no rainless regions in Australasia such as exist in parts of Africa, and also in South America, where, for instance, the greater portion of the coast of Chili, as well as part of Peru and Bolivia, is almost altogether rainless, and there is a lack of vegetation. Even in Central Australia there is an average precipitation of from 5 to 12 in. per annum, the rain being quickly accompanied by an extraordinarily rapid growth of vegetation.

There is room for vast multitudes of people to occupy the empty spaces of the Commonwealth, of whose large area of almost

3,000,000 square miles some two-thirds is held to be suited for human occupation. What has been the experience of the various States in relation to the growth and vitality of the population from the beginning up to now? The density of population in 1909 was 9·83 per square mile in New Zealand, in Victoria 14·8, and in New South Wales 4·92, while for the Commonwealth as a whole the rate was but 1·47 per square mile. The six chief cities of the Commonwealth, however, at the date named absorbed 36·3 per cent. of its population, Melbourne having the highest ratio of 43·14 per cent. of the Victorian population.¹ The census of 1901 showed that the Australian-born element of the population amount to 77·25 per cent., whilst of the remainder, 18 per cent. were natives of the United Kingdom. In New Zealand in 1901 66·8 per cent. of the population had been born in the Dominion, 3·5 per cent. had been born in the Australian Commonwealth, and 26·5 in the United Kingdom. The increase of population by immigration has fluctuated very greatly, as is well known, at various periods.

The death-rate of females in Australia is lower than that of males at almost all ages except 10-20 years; but as an excess of males exists,² the effect of the death-rate would appear to be inappreciable. Decline in the birth-rate is operative, in opposition to the often accepted doctrine that a high birth-rate results from national prosperity. Nowhere is the standard of comfort, it is claimed, so high as it is in the democratic communities of Australasia, yet the birth-rate is not so high now as in the past, although ability to marry at early ages is greater probably than elsewhere. The proportion of the population unmarried is increasing, greater opportunities for suitable employment of females tending to foster individual independence. Yet consideration of the figures in the following table will show that the birth-rates are equal to those of Great Britain, and in certain of the States more favourable, whilst the general death-rates, especially the rates of infantile mortality, are claimed to be the lowest in the world.

¹ The 1911 Census showed that Melbourne's population in proportion to the total Victorian population had increased to 45 per cent., and that of Sydney from 36·8 per cent. in 1907 to 38·4 per cent. of the population of New South Wales.

² The number of males to females in the Commonwealth in 1901 for ages 20-65 was in the ratio of 1·09 to 1.

Births and deaths per 1,000 of mean population for year 1909.

	Birth Rates, 1909.	Death Rates, 1909.	Proportion of Deaths under 1 year to 1000 Births, 1909. ¹
New South Wales	27·3	9·8	73·9
Victoria	24·6	11·2	71·4
New Zealand	27·3	9·2	62·0
Queensland... ..	27·5	9·8	71·5
South Australia... ..	24·6	9·4	61·0
West Australia	28·1	10·0	78·0
Tasmania	29·9	10·0	64·9
Commonwealth... ..	26·4	10·22	71·6
England and Wales (1908) ..	26·5	14·7	120·0

It will be seen that the Commonwealth birth-rate in 1909 was identical with that of England and Wales in 1908, but the death-rate was 4·5 per 1,000 lower, whilst the deaths under 1 year per 1,000 inhabitants was 40 per cent. lower. An examination of the N.S. Wales census figures of 1901 shows that the married women of 35 and upwards exceeded those below the age of 35 by 30·6 per cent. This growing difference in the proportions has been coincident with the most rapid decline in the birth-rate.² The proportion both of married men and married women has largely decreased at the ages when generation is most active. The Royal Commission's Report of 1904, N.S. Wales (p. 8) stated, however, that "the decline in the birth-rate of New South Wales is not due to any difference in the constitution of the population as regards age"; although "in whatever way the waning birth-rate of New South Wales is viewed . . . it is seen as a grave disorder sapping the vitals of a new people, dispelling its hopes, blighting its prospects, and threatening its continuance. The future of the Commonwealth, and especially the possibility of maintaining a 'White Australia' depend on the question whether we shall be able to people the vast areas of the Continent which are capable of supporting a large population. This can only be done by restoring and maintaining a high rate of natural increase, or by immigration on a large scale, or by both these means of recruiting posterity. With the maintenance of a high rate of natural increase is inseparably connected the preservation of infant life. We have shown³ that the defective birth-rate is aggravated in its effects in reducing natural increase

¹ See also table on p. 427.

² Vide "The Decline in the Birth-Rate in N.S. Wales," by Richard Fecce, F.I.A., 1904.

³ This is, however, open to question.—Vide p. 427.

by an excessive death-rate among the newly born." The extent of the decline in the birth-rate for the Commonwealth as a whole in the years 1901-9 will be seen from the following table.—

Birth-rate per 1,000 of mean population (Commonwealth).

1901	27 14	1906	26 41
1902	26 66	1907	26 55
1903	25 23	1908	26 35
1904	26 33	1909	26 40
1905	26 12		
		Mean of 9 years	26 35

It will be noticed that the rates for 1906-9 are not less than, but generally in excess of the mean for the nine years, and this affords some ground for hopefulness. At any rate, the persistent decline in the birth-rate, if not yet arrested, is a phenomenon which is being experienced among civilised nations the world over. Regarding the birth-rates, a special inquiry in New South Wales was made in 1904 by the then Government Statistician (Mr G. A. Coghlan), and this investigation disclosed the following variations in the numbers of legitimate births to every 1,000 married women under the age of 15 years—

Year	Rate	In 1901
1891	336 3	—
1895	311 7	+ 5 4
1891	289 7	- 53 0
1895	260 3	28 4
1901	235 3	25 0

In England and Wales at the census of 1901 the corresponding rate was 235 per 1,000. That there has been a constant and serious decline in the birth-rate must be admitted. The fact should not be overlooked in this connection that, as a result of the Australian financial crisis of 1893, there was a great disturbance of prices and values generally, which had the effect of hindering national progress in many ways, whilst immigration to Australia as a whole fell to a minimum. A less active disposition to matrimony was witnessed on prudential or economic grounds. A falling off in the marriage rate resulted in a decreased birth-rate, and this in turn had an appreciable effect upon the rate of mortality.

Commenting upon the present position, the President (Dr. Pockley), at the Australasian Medical Congress held in Sydney in September, 1911, thus referred to the birth-rate problem: "When the figures for the birth-rate are analysed, it is found that the falling off occurs chiefly amongst the thrifty and provident, the physically and mentally desirable classes, not amongst

the thriftless and improvident and degenerate, so that the race is rapidly recruiting itself from below. Statistics give the birth-rate per family of the unfit or degenerate as 7·3, compared with 4·5 of a healthy stock. . . . Whilst humanitarians are striving to abolish tuberculosis, others are of opinion that 'this disease forms a rough but on the whole, very serviceable check on the survival and propagation of the unfit, and that if to-morrow the tubercle bacillus were non-existent it would be nothing short of a national calamity.' "

Apart from such physical and moral considerations, there are matters that claim attention in regard to the future of Australians. It is necessary here to review the available evidence relative to the comparative longevity of the race in order to arrive at valid conclusions as to the future progress and prospects. In a cold climate oaks grow slowly, more rapidly in a warmer zone; but does the timber of quicker growth last as long and prove as serviceable as that of the oak which came to maturity slowly? There is one class of critic who, drawing an analogy from the effects of the climate of India upon Europeans, deems it axiomatic that the third generation of Australians should manifest a falling off in stamina. If it be so, this falling off should result in a weakening of the vital energy perceptible on analysis of the records of mortality. It is held by some writers that the best test of salubrity of climate and suitable racial environment is the rate of infantile mortality. Judged by this test the Australasian figures are found to be very favourable (see table on page 425). The following comparative figures may also be quoted :

Rate of infantile mortality (deaths under 1 year per 1,000 births registered).

	Year.	Rate.
New Zealand	1909	62
Commonwealth... ..	1909	72
England and Wales ..	1908	120
Scotland	1907	110
France	1906	143
German Empire	1907	176
Canada (Ontario)	1906	162

Obviously, in drawing any general conclusions from statistics relating to births and deaths, allowance must be made for differences in age and constitution of the various populations. Further proof of light mortality is afforded by comparing the infantile deaths in the metropolitan areas of the Commonwealth States in 1910 :—

*Deaths under 1 year per 1,000 registered births, 1910,
Metropolitan areas.*

South Australia	78.3
West Australia	78.9
New South Wales	83.7
Queensland	84.2
Victoria	92.6
Tasmania	118.6 ¹

For the Commonwealth as a whole the rate in 1910 for Metropolitan districts was 86.5 whilst the rate for other districts than Metropolitan was only 68.06 per 1,000 births. The decrease in the infantile death rates experienced over the Commonwealth as a whole has been substantial during the nine years 1901-9, having fallen from 103.6 in 1901 to 71.56 in 1909, and even accepting Goldwin Smith's dictum (referring to British rule in India) that "No race can for ever hold and rule a land in which it cannot rear its children," it cannot be doubted that the Australian figures provide a satisfactory showing.

In reference to the physical development of children in Australia the following table, published in 1908, contains the result of a series of records obtained by the Public Instruction Department in New South Wales² in regard to pupils under tuition.

New South Wales Boys (1881-1888)			New South Wales Girls (1881-1888)		
Age last Birthday	Height	Weight	Age last Birthday	Height	Weight
	ft in	st lbs		ft in	st lbs
4	3 3	2 9	4	3 2	2 8
5	3 5½	2 12½	5	3 5	2 11½
6	3 7½	3 2½	6	3 7½	3 1
7	3 10	3 6½	7	3 9½	3 5½
8	4 0	3 11	8	3 11½	3 10
9	4 1½	4 1½	9	4 1½	4 0½
10	4 3½	4 6½	10	4 3½	4 6
11	4 5½	4 12	11	4 5½	4 12
12	4 7	5 9½	12	4 7½	5 6½
13	4 9	5 11	13	4 10	6 3
14	5 0	6 9	14	5 0	6 12
15	5 2	7 5½	15	5 1½	7 6
16	5 4½	8 6½	16	5 2	7 11½
17	5 6	9 1½	17	5 2	8 0
18	5 6½	9 8	18	5 2½	8 3

The figures show that the Australian boy, as compared with

¹ The Tasmanian figures were exceptionally high in 1910

² In New South Wales for the quinquennium 1881-1888 the rate was as high as 124.1 deaths per 1,000 births

³ Table published in 1908 by the Department of Public Instruction

an English lad, is, on the average, a little heavier at ages 4 to 7 and 14 to 15, and is taller but a little lighter at ages 8 to 13 and 16 to 17. With reference to young lives, the Australian records must be regarded as exhibiting satisfactory results. With respect to the rates of mortality experienced generally throughout Australasia, it may be pointed out that the death-rates of the principal cities, for the year 1909, were as follows :—

Death-rate (per 1,000 of population) in principal cities (including suburbs) in 1909.

Wellington (N.Z.)	... ..	9.11	Melbourne	... ..	12.47
Sydney...	... ..	10.26	Hobart	... ..	14.04
Brisbane	... ..	10.84	Perth...	... ..	14.28
Adelaide	... ..	11.75			

The lowness of these rates is specially noteworthy. That heavier death-rates may be experienced in time to come seems, however, probable when the effects of an increased density of population, augmented industrial competition, and the vicissitudes of rapidly growing business pursuits become more evident; on the other hand, improvements in medical science and methods of sanitation tend to diminish the general death-rates. It is claimed for Sydney that its rate is the lowest in the world for any city exceeding 200,000 inhabitants. For the Commonwealth as a whole the deaths of males and females for the period 1901-1909 have been grouped into age periods, and the relative percentages of total deaths are as follows :—

Deaths, 1901-9, at various ages (Commonwealth).

Under 1 year...	... ..	20.7	per cent. of total deaths in period			
1 year and under	5 years ...	6.5	..	..	..	..
5 years	20 ..	6.4	..	..	..	..
20 ..	40 ..	15.1	..	..	..	..
40 ..	60 ..	17.8	..	..	..	..
60 ..	65 ..	5.4	..	..	..	..
65 .. and over	... ..	28.0	..	..	..	..
Age not stated...	... ..	0.1	..	..	..	..
		100.0				

At various times the expectation of life, computed from census returns and registered deaths, has been the subject of actuarial investigation, and the results are instructive. The following comparison shows the expectation of life by various mortality tables as stated :—

Complete expectation of life.

Age.	New Zealand. Males. (Leslie.)	New South Wales. Males. (Coghlan.) 1890-1.	New South Wales and Victoria. Males and Females. 1881-1891	England. Males. (Ogle.) 1871-1880.	Sydney. ¹ Males and Females. 1881-1891.	Melbourne. ¹ Males and Females. 1881-91.	London. Life Table. 1881-1900.
	years.						years.
0	54.4	49.6	49.4	41.4	43.4	40.9	40.9
5	57.2	54.9	51.4	50.9	51.6	49.7	51.6
15	48.7	46.4	46.0	43.4	43.3	41.7	43.4
25	40.7	38.2	38.0	35.7	35.5	34.2	35.0
35	32.8	30.5	30.8	28.6	28.4	27.5	27.3
45	25.2	23.3	23.8	22.1	21.9	21.3	20.7
55	18.2	16.6	17.2	16.0	16.0	15.7	14.8
65	12.1	11.0	11.4	10.6	11.0	10.8	9.8
75	7.2	6.5	7.0	6.3	6.9	6.9	5.9

A scrutiny of these results, allowing for the variation in the periods embraced in the computations, shows that Australian city populations have, on the whole, at least as good an expectation as English people (town and country), whilst New Zealand, New South Wales, and Victoria show higher expectancy rates in each instance. In this connection it may be of service also to quote the mortality experience among special sections of the community, such as the members of Friendly Societies and Life Assurance Offices. The following table gives the rates of mortality experienced by Friendly Societies in England, N.S. Wales, and elsewhere for various age groups amongst their members:—

*Friendly Societies.**Annual rate of mortality per cent. among members.*

Age	England. Manchester Unity for 1893-7.	New South Wales Friendly Societies. 1900-8.	Queensland Friendly Societies. 1902-6.	New Zealand Friendly Societies. 1896-97.	Victoria Friendly Societies. 1881-90.
16-20	0.26	0.29	0.34	0.41	0.31
21-25	0.39	0.30	0.36	0.53	0.47
31-35	0.58	0.42	0.46	0.63	0.63
41-45	0.98	0.68	0.85	0.92	1.3
51-55	1.8	1.4	1.3	1.5	2.1
61-65	3.9	3.2	3.2	3.1	3.9
71-75	8.8	7.6	8.5	6.3	7.8
81-75	18.7	17.2	—	14.6	—

(*Vide* Government Statistician's Report on Friendly Societies, N.S. Wales, 1909, p. 29.)

As regards assured lives, valuable evidence as to the comparative longevity of Australians may be gathered from the published

¹ *Vide* Paper by the writer published in *Proceedings of Royal Society of N.S. Wales*, 1910, Vol. 44, pp. 231-2.

records relative to the mortality rates experienced by the Australian Mutual Provident Society, the largest Australian Life Office, since its foundation in 1849 up to 1903. A comparison of the tables deduced from its experience at various periods will afford a clear idea as to what measure of improvement has been manifested in regard to the vitality of assured lives during the past sixty years. The average age of assurers at entry, 28·9 years, is an important factor, necessarily distinguishing all results from those relating to the general population. It was stated in the Society's mortality report, published in 1888, that "it will be found that the actual deaths among the European born are 69·8 per cent. of the expected, while among the Colonial born they are only 58·5 per cent. . . . The figures I have quoted justify a strong presumption that the Colonial born lives in this Society exhibit greater vitality than those of European nativity. Whether and to what extent this is due to the immigration of Europeans of deficient vital force, who seek in the climate of Australasia an escape from impending ill-health, I have not the means to determine." In this connection it is obviously necessary to remember that the same medical tests are required to be passed at entry irrespective of place of birth. Perhaps the best method of establishing a reliable comparison is to take the ascertained figures relating to the expectation of life. The computed tables of expectation of life, based upon the experience of assured (selected) lives in various countries named, at the dates specified, are furnished in the following comparison :—

Expectation of Life (Assured Lives).

Age.	Australian Mutual Provident Society.			Twenty British Offices. Healthy Males.	Thirty American Others Males.	France. Males. 1819-1887.
	Males and Females.		Healthy Males. ¹ 1904.			
	1878.	1888.				
0	—	58·9	—	—	—	51·9
5	—	59·5	—	—	—	53·1
10	54·2	55·7	—	50·3	50·0	49·7
15	49·9	51·3	51·9	46·2	46·6	45·4
20	46·0	47·1	47·4	42·1	43·1	41·6
25	42·0	42·9	43·1	38·4	39·5	38·0
35	33·6	34·6	34·7	31·0	32·2	30·2
45	25·6	26·7	26·6	23·8	24·8	22·9
55	17·9	19·3	19·1	17·0	17·8	16·1
65	11·1	12·4	12·4	11·0	11·6	10·5
75	6·4	7·1	7·4	6·4	6·7	6·1
85	3·5	3·5	3·6	3·5	3·4	3·3

¹ The female mortality experience calculated separately shows greater vitality than for males.

It will be seen (1) that the Society's latest expectation table is even more favourable than was shown on previous occasions; (2) that in comparison with the experience of other countries, that of the Australian Office is much more favourable as regards longevity; (3) that the results disclosed by the latest report would appear to be fair evidence of increasing vitality among the members of the Society; and (4) that the improvement shown relates to adult lives and does not depend upon a reduction in infantile mortality or greater efficiency in prolonging the lives of the feeble and delicate in the general population. But it is of some importance to learn in what manner these results are affected by the Society's experience in the various States, and in order to throw some light upon this point, without having recourse to a complete mortality investigation, the writer has been permitted by the Society to analyse the schedule of deaths occurring in the year 1910, and has thus distributed the deaths in groups, for ages at death, regarding each State separately, as follows:—

Aggregate years of life lived for death claims in 1910
(A.M.P. Society).

Ages at Death.	New South Wales.	Victoria.	Queensland.	South Australia.	West Australia.	Tasmania.	New Zealand.	London Branch.
years.								
10-24	310	398	100	132	—	22	154	—
25-29	432	540	81	54	27	81	324	—
30-34	800	704	384	96	32	96	512	32
35-39	962	708	333	222	481	148	814	37
40-44	1,008	1,386	210	420	378	84	630	132
45-49	2,115	2,209	752	235	376	329	987	91
50-54	1,508	1,664	832	468	260	364	572	156
55-59	1,995	1,710	513	627	342	171	1,083	171
60-64	1,674	930	992	248	124	434	992	—
65-69	1,407	1,273	938	938	268	134	1,541	268
70-74	2,520	1,800	576	576	288	144	1,512	72
75-79	1,617	2,233	616	539	77	539	924	77
80-84	1,968	1,476	164	328	164	—	410	164
85-89	174	522	—	174	—	—	522	—
90-94	276	92	—	—	—	92	—	—
—	18,766	17,640	6,491	5,057	2,817	2,638	10,977	1,203
No. of Lives }	349	335	124	91	57	49	206	21
Average Age at death }	53·9	52·7	52·3	55·5	49·4	53·8	53·2	57·3

From the data thus given it will be seen that in the year

mentioned, as regards 1,232 lives in all, the average age at death under policies which became claims was 53·2 years, but this average age varied from 49·4 years in West Australia to 55·5 years in South Australia. The average age for claims on policies on the books of the London branch was, however, 57·3 years, but this cannot well be compared with the figures for the States in Australasia, since the London policies represented largely those of members who, often after lengthy residence in Australia, had become domiciled abroad. These varying rates relate only to one year, and some fluctuations obviously may be expected.

In Dr. Farr's English life table, No. 3, based on the general population figures, the mean age at death for a stationary population was given as 40·9 years for males, and this rate corresponded with the expectation of life at birth. In New Zealand for the year 1909 the average age at death among the general population was for males 42·76 years, and, for females, only 38·78 years, whilst the expectation of life at birth was, by the mortality table (*vide* p. 430 hereof), 54·4 years for male lives, and 57·3 years for female lives. The mean age at death, therefore, is but an imperfect test of the duration of life where the births, or new entrants, constantly exceed the deaths, and immigration and emigration are also important factors. Also, since life office figures include but few deaths under 20 years, the average age at death is greater than it would be in the case of population generally. It may be remarked that the "expectation of life" practically indicates the number of annual premiums which will, on the average, be received by life offices.

That the prospects of life offices in all the States of Australasia are of a favourable nature, in respect of the degree of vitality experienced among the lives assured, will probably be admitted. Some allowance needs obviously to be made for the fact that the State where an assured's death claim became payable is not necessarily that in which he was born or became assured; but the general result of the tables is sufficiently close to the facts for our present purpose, and is quite confirmatory of the general results regarding the town and country populations. This investigation of the records of the people of Australasia respecting vitality and longevity as influenced by climatic environment of the race, based upon official statistics as published under the authority of the Commonwealth and State Governments, supplemented by statistical facts available from other authentic sources, should tend to aid in removing from the region of theory to that of fact the nature of the prospects of Australians in regard to the future of the race.

The aim of the writer has been to set out some of the factors involved in problems that now present themselves to the people of Australia and New Zealand, and to the reader may be left the burden of assessing the weight and value of the evidence adduced.

Of New Guinea, Fiji, and the New Hebrides, and the problems of a special character which appertain to each, space precludes any mention now. With respect to the Commonwealth itself, Mr. Foster Fraser has recently said that "the vision of the Australian continent peopled entirely with a white race is magnificent. The turning of the vision into a reality is the ambition of all Australians . . . removed from those parts of the world where the white races originated and next door to races which are yellow, brown and black." Literally next door, indeed, to lands which are being developed by people of other nationalities, customs, and ambitions; whose influence now and hereafter through commercial and political relations upon the development of Australasia remains to be fully estimated. Mistakes have doubtless been made in the past, but may not Australians hopefully say, with Goethe, that "if there exists an actual necessity for a great reform amongst a people, God is with it, and it prospers."

The population of Australia, as ascertained by the recently taken census, already includes 57,700 non-Europeans of full blood and 14,500 half-castes, viz., 30,000 aborigines, 25,700 Chinese, 3,500 Japanese, and considerable numbers of Syrians, Malays, Polynesians, and Papuans, and a sprinkling of other races. The census results as a whole may be briefly summarised as follows :—

Population of the Commonwealth, 1911.

	Males.	Females.
Under 5 years of age	267,410	258,223
5 years and under 15	445,409	436,103
15 " " 21	273,655	267,185
21 " " 45	819,115	785,120
45 " " 65	364,682	291,209
65 years and over	100,357	90,224
Ages not stated... ..	12,407	10,906
	2,313,035	2,141,970
	2,141,970	
Total	4,455,005	
Population at previous census in 1901	3,773,801	
Increase	681,204	

The growth of the population in recent years from immigration should also be noted. The latest figures show the net gain from



oversea immigration was, in 1908, 13,150 ; in 1909, 28,933 ; and in 1910, 37,517 ; and these gains, whilst small as compared with the immigration totals of the United States and Canada, are yet distinctly encouraging to Australians, who anticipate that a still greater influx of population may accrue in the immediate future. May their anticipations be realised !

A. DUCKWORTH,
*Correspondent of the Royal Economic
Society for New South Wales.*

Sydney, January, 1912.

REVIEWS

Labour Unrest. By HAROLD COX. (British Constitution Association Leaflet. 1912.)

The Causes of Labour Unrest, and the Remedies for it: The Draft of a Report. By W. CUNNINGHAM, D.D. (London: John Murray. 1912.)

The Labour Unrest. By H. G. WELLS. (Reprinted from the *Daily Mail*. 1912.)

THESE three pamphlets, taken together, form an interesting and in many ways instructive study in what is known—in perhaps a more specific sense than the phenomena actually warrant—as the problem of Labour Unrest. If they may be said to be representative of typical schools of thought and methods of approach, the differences they represent both in manner and in substance reflect above everything else the temperament and context of their authors. Mr. Harold Cox writes on behalf of the British Constitution Association, and his argument is developed mainly in the form of a polemic against the “rhetorical absurdities” which he imputes (rather freely) to the Socialism of the street. The polemic is perhaps rendered less fruitful, if not altogether superfluous, by the admission that there is a Socialism which consists in “arguable propositions” and has “nothing whatever to do” with “the Socialist fallacy.” In any case, however, the “final” remedy for present discontents lies not in any “mechanical reorganisation,” but in a change of heart—in a word, in the moralisation of employer and employed. Dr. Cunningham’s contribution is presented in the form of the draft of a report which was meant for a Joint Committee of the Upper and Lower Houses of Convocation on “the moral witness of the Church on economic subjects,” but, by the happy accident of a breach in ecclesiastical etiquette, has been given to a wider public. The report itself is in the form of a draft drawn up in the first instance by Dr. Cunningham, and embodying certain amendments in expression

and in matters of detail suggested by correspondence with other members of the Committee. A statement thus arrived at has all the merits and defects of its origin. On the one hand, it is the hand, if not the voice, of a master of the subject, and is therefore eminently synoptic and judicial; on the other hand, Dr. Cunningham's endeavour to preserve a sense of proportion has succeeded at the cost of considerable self-effacement; and the result (as would appear from the author's account of its reception) can only be described as a minimum of statement and of doctrine on which his colleagues might be expected to agree. There are not a few students who might have preferred the whole to the half mind of such a competent thinker and observer as Dr. Cunningham. On the other hand, they will find some compensation for the tentative "half revealed and half concealed" remedies proposed by the author in the careful and (within its limits) admirable statement of the causes of Labour Unrest in the widest sense: in every way a great advance in analysis and discrimination upon the somewhat perfunctory—or, at any rate, predominantly abstract and dialectical—statement which Mr. Harold Cox has deemed sufficient for the purpose. Otherwise, Dr. Cunningham's prescription for "unrest," as distinguished in its more specific sense from "privation," does not seem to differ in any significant way from Mr. Cox's appeal to "a change of spirit"; except that Dr. Cunningham would extend the appeal to all classes of the community, and looks in particular, as was only meet and right, to the fostering influence of the Church. On the other hand, he recognises that "we cannot appreciate the struggle aright if we persist in thinking of it as a mere conflict of interests, and can only do the antagonists justice when we remember that each of the opposing parties represents a principle"—both principles being "equally sound and of great importance to the welfare of the community"—the principle of a living wage and the principle of scope and of freedom for enterprise. The point cuts rather deep, and it is also the essence of Hegel's definition of tragedy.

Mr. Wells's argument moves in a much less confined as well as in a much more exciting atmosphere. It deals with the problem at large—too large, it may be thought, for the more pedestrian or fastidious economist. If Mr. Cox and Dr. Cunningham confine themselves to the problem of promoting prosperity within the existing industrial system, Mr. Wells sees nothing for it but a change in the system itself—a change that "nearly all the forces of our time seem to be in a conspiracy to bring about"—involving "the disappearance of a labour or wage-earning class

as such," and the rearrangement of work and industry upon a new basis. A large order, it might seem, but, as Mr. Wells insists, requiring a good deal of prayer and fasting for its accomplishment. Like Mr. Cox and Dr. Cunningham, Mr. Wells looks indeed to a "change of spirit," but it is to be a change in the general body of society—"a great, deliberate renaissance of will and understanding," "a real endeavour on the part of the community to recast and radically alter its social methods as a whole," and—to use a characteristic formula of Mr. Wells—upon a national plan. So far as Mr. Wells sees salvation in "thinking things together," he appears to be crying back to Plato, and to the philosopher-king in the shape of the sociological expert. But he really has in mind not so much the sovereignty of the specialised expert as that of a diffused knowledge and understanding. "A modern community has to think out its problems as a whole and co-operate as a whole in their solution," and this means "that we have all to think, to think hard and think generously." Mr. Wells's appeal is in some ways an echo of Professor Marshall's conception of "economic chivalry," but it is really the voice of Ruskin, of Carlyle, and of Matthew Arnold speaking to a generation that has not hearkened to them. Mr. Wells, moreover, has pressed into the service of his message what his clients justly describe as a "pungent and arresting English style." Few readers, for instance, can fail to be arrested by his simile of the *Titanic* disaster—"the penetrating comment of chance upon our entire social situation"—"not an incident in it all that was not supremely typical." On the other hand, Mr. Wells's business in this tract for the times is, as he himself says, not prescription, but diagnosis: it is a diagnosis, however, which suggests not so much any remedy in particular as a complete overhauling of the patient; and, as could only be expected, Mr. Wells is much more precise in his vision of the end than in his suggestion of the means.

It may be worth while to pursue this general comparison into further detail. Dr. Cunningham differs from Mr. Cox and Mr. Wells in distinguishing two things that may be considered to be covered by the designation of "labour unrest"—"privation" and "discontent"—and a great, if not the most instructive, part of his statement is directed to the causes and remedies for privation. In this connection special prominence is given to the increased cost of living, which Mr. Cox is disposed to regard as an irrelevant element in the situation. Both Dr. Cunningham and Mr. Wells, on the other hand, dwell in their different ways on the fact that

changes in the value of money have given rise to unexpected privation, and afforded an excuse for breaches of contract—not an altogether insignificant feature of industrial unrest. Dr. Cunningham enforces the distinction between privation and discontent, more particularly by indicating that many of the measures which have been intended to promote the welfare of the working classes, while they may have been beneficial to the “well-to-do,” have been of no appreciable advantage to the “very poor.” In fact, he suggests, not without some show of reason, that some of the expedients for improving the condition of well-to-do artisans have tended to swell unemployment and to increase the competition among the very poor, while the rise of prices has increased their privation. Side by side with this account of the effect of legislation upon the condition of the very poor—defined as “those who are never certain of continuous employment and live from hand to mouth”—Dr. Cunningham analyses certain changes in the demand of labour, which he connects partly with a reduced demand for labour on the land and the effect of rural unemployment upon the payment for unskilled labour, partly with the fact that the increasing investment of British capital in foreign parts, while it has been to the general advantage of the owners of capital, has involved a relative decline in the demand for British labour.

Dr. Cunningham has no remedy to offer for the increase in the cost of living, though he suggests that contracts for long periods should be interpreted in terms of a tabular standard—requiring for its establishment the action of an economic expert. In regard to the desirability or possibility of invoking the aid of State action in developing the demand for labour, Dr. Cunningham advocates the cultivation of the open—as well as the cautious—mind. Schemes for the development of rural industry may do some good, but also quite as much harm. The primary question for the very poor is not so much as to what wages they may get, as to how they are to get any wages at all; and here Dr. Cunningham does not, in the circumstances, venture to do more than plead for “fuller consideration” of proposals to impose taxes on any manufactured goods coming into this country from abroad, which might be manufactured in this country, according to the proportion in which labour enters into the expense of production. He also suggests that the Government might attempt to discriminate between the various ways in which capital is invested, and devise methods, such as, for example, are in operation (and in a more refined form than taxation) in Germany, for

"directing capital into those forms of investment which are most beneficial to the country generally."

Whatever may be the value of these and similar considerations, it might be said that they are not directly pertinent to a movement which is sufficiently distinctive to be described as a "new phenomenon"; and it is with "the sudden emergence of the labour problem in a form that differs fundamentally from all previous labour disputes" that Mr. Cox and Mr. Wells are primarily, if not exclusively, concerned. This is the phenomenon popularly described as Labour Unrest, which all the writers are agreed in regarding as a mental rather than material condition; it is, as Mr. Wells puts it, "a psychological question, a matter of mental states." Both Mr. Cox and Mr. Wells accentuate the "newness" of a movement which might perhaps be described with more pertinence as a century-old movement with a difference. "The characteristic of the new situation," says Mr. Cox, "is the substitution of the general for the partial strike, and the assertion of the solidarity of labour in the form of the class war between the workers and the owners." What is new is the assertion of the general strike and solidarity of labour in the shape not of pious aspirations (as they were, for instance, to Robert Owen), but of partially accomplished facts—they have passed from the region of speculation into practical politics. It is somewhat surprising that with so much perception Mr. Cox should occupy himself with demonstrating the "unreality" of the class war as resting on nothing more solid than "the pretended distinction between owners and workers." A distinction is not less a distinction because it is not absolute or unqualified; the pretended distinction is certainly true in a more significant sense than it is untrue, nor can ideas which actually operate be treated as altogether unreal. Mr. Wells again sees in the present situation the development of a new quality of ideas and of outlook in the worker. "The worker is beginning now to strike for unprecedented ends—against the system, against the fundamental conditions of labour, to strike for no defined ends at all, perplexingly and disconcertingly. The old-fashioned strike was a method of bargaining, clumsy and violent, but bargaining still; the new-fashioned strike is far less of a haggle, far more of a display of temper"—a note upon which Mr. Wells harps with a somewhat exaggerated emphasis. Both writers, again, agree in tracing the changed "temper" of labour to an advance in education and reflection—to the growth of a generation which has learned how to read, and is beginning to think, to compare

and contrast inequalities of condition and opportunity—resulting in what Mr. Wells describes as “a working-class criticism of social values.” The worker, we are told, no longer takes the social system for granted: he looks far beyond the older conflict between employer and employed: he revolts against a system in which the idle may be rich and the worker insecure: he criticises the good intentions of “the whole system of governing and influential people,” and not only their good intentions, but their ability. And to meet this challenge—this “gravely and deliberately revolutionary” movement—“the politician or business magnate of to-day is no better educated and very little better informed than his equals were fifty years ago. The chief difference is golf.” The state of mind thus envisaged by Mr. Wells is something more than a state of “discontent”; it is a state of “deepening resentment and distrust”—and “confidence” can only be restored by the display of “heroic” virtue and intelligence on the part of rulers and owners. Mr. Cox and (perhaps in a less degree) Dr. Cunningham would seem to be included among the “middle-aged and elderly gentlemen” who are endeavouring, according to Mr. Wells, to conjure the spectre of “unrest” with the formulæ and incantations that have ceased to charm.

Mr. Cox's argument moves lightly and airily enough over the ground he has selected for his dialectic; but it would have been more substantial and instructive if Mr. Cox had reckoned rather more closely with such rudimentary distinctions as Dr. Cunningham is careful to draw between the capitalist and the employer, the profits of employment and the profits of speculation, the rent of the rural and the rent of the urban landlord. Mr. Cox treats the problem as if it was merely a question of the relative remuneration of capital and labour in a specific industry—from any point of view a very partial statement of the problem; and this can only be settled by the law of supply and demand—an equally partial statement of its solution. The rest is simple: to improve the position of the labourer we must increase the supply of capital and reduce the supply of labour “by restricting the birth-rate.” The latter part of the prescription (though it is regarded as self-evident to the “astute” reader) is not insisted upon, apparently through fear of nothing worse than abuse from “celibate bishops,” and Mr. Cox falls back upon the “strictly economic” method of increasing the supply of capital and the efficiency of labour. On the other hand, so long as the whole relation between employer and workman turns on a struggle for their share of the total product, “labour unrest is inevitable”; and since, what-

life, in the awakening and restoration of a social conscience. All this and more Mr. Wells develops with a keenness of vision and an energy of expression that are all his own, and with the art and resource of the literary preacher. If he seems to fly more than he walks, if his handling of the problem may seem somewhat impalpable as also somewhat arbitrary in emphasis, if the argument, while it certainly palpitates, may not seem always to "palpitate with actuality"—Mr. Wells's treatment of the problem has the advantage over Mr. Cox and Dr. Cunningham not only in horizon, but in—what is, after all, the most important matter for the purpose—the statement of the problem itself. If his ideas are large, they are also relevant—as they are certainly "stimulating." On the other hand, both Mr. Cox and Dr. Cunningham may be said to take account of certain neglected elements in Mr. Wells's diagnosis, and in some respects to supply a needful corrective in the shape of facts which, if they are not the whole facts, are none the less hard facts, and to be reckoned with in any National plan.

SIDNEY BALL.

The History of Local Rates in England in Relation to the Proper Distribution of the Burden of Taxation. By EDWIN CANNAN, Second edition. (P. S. King and Son. 1912. Pp. xiv + 215.)

INTEREST in Professor Cannan's new edition of his *History of Local Rates* will be centred chiefly upon the two additional chapters, which alone differentiate the present volume from that published in 1896. The *History* remains practically unchanged, a matter on the whole for congratulation, since it is difficult to suggest any direction in which the study, at once learned and shrewd, could be improved. Professor Cannan writes frankly with a purpose. To use his own phrase, it may be said that the history was not written out of "a love of truth in the abstract or to while away a wet Sunday afternoon." It is admitted that the history has a bearing upon present controversies; but anyone who did not write good history, faithfully and impartially, would hardly make this admission with Professor Cannan's candour, and there are no grounds for suspecting bias.

The additional chapters, "The Equity of Local Rates" and "The Economy of Local Rates," are not ungracefully tacked on to the *History* itself, though they have really not much to do with it, so far as "history" is supposed to be narrative. They are, in fact, an important contribution to economic theory, and carry a good stage further the right understanding of the bearing

of local taxation upon the distribution and use of productive resources. In the study of taxation a considerable distance has been travelled during recent years, and the old, solitary question, "Who pays?" which was asked and answered in a somewhat narrow way by economists, has given place to the further question, "What are the effects?" Taxation is no longer regarded as a matter which by a somewhat inconvenient tradition forms part of "Political Economy" and can be dismissed in a brief chapter in the text-book on Economics, without relation to the cardinal theories of value. Professor Cannan, in his present and previous writings, has done much to raise the treatment of the subject to a higher and a wider plane, and although the views which he expresses may not be entirely novel (no economist could ever claim so much), it is true to say that in the present volume they are stated more cogently and explicitly than by previous writers.

Since the earliest days of economic study the importance of the principle of differentiation of functions has been recognised. Economists have never failed to lay stress on the condition of maximum production, that every person should do that for which he is relatively the most fitted. Less stress has been laid upon the complementary principle that every person should be in the place where he is relatively most wanted. Professor Cannan has realised the importance of an economical distribution of population, and in the present volume shows the importance of local taxation in affecting that distribution. The "discovery," if such it may be termed, is none the less noteworthy because it rests on a simple and familiar basis, namely, that unless people pay for what they get, extravagance and waste will result. If the consumers or inhabitants do not pay for the services provided by the local authority, there are no means of securing a correspondence between sacrifice and enjoyment. If the drainage of a marshy district is not paid for by the people who live there, it is obvious that such a district will acquire more than its due or economical share of population, since its inhabitants enjoy the advantages of the district, without the disadvantage represented by the cost of drainage. Professor Cannan would apply the essential part of this simple argument to all cases where the expenditure of a district in supplying services is not economical. The amount by which rates levied on residents in a district exceeds the value of the services performed can come only from one source, namely, rent. The value of house accommodation, &c., plus services in one place is relatively to similar accommodation and services elsewhere a fixed amount, and to the resident

as such it makes no difference, therefore, how his outlay is distributed between rent and rates. The total of the two is determined by the relative desirability of the district. The argument, therefore, is, that so far as expenditure from rates is uneconomical it will fall on the land-owners. Conversely, so far as it is economical, so far as it represents good value for money and adds to the net desirability of the district, it will benefit the land-owners. The conclusion is thus reached, that as regards "economical" expenditure any attempt to transfer the payment from the occupiers to the owners must, in the long run, fail, while so far as the expenditure is not economical a certain amount is taken from the pockets of the owners, without a corresponding benefit being conferred on the inhabitants. Professor Cannan argues therefore that an attempt on the part of localities to confer benefits on their inhabitants without regard to cost must result in a shifting of population from the districts where the amount going to owners is small, to the districts where the amount is large, and the process being continued would result in the end in an entire absorption of rent in "the futile task of paying people to be where they should not be."

Holding these views, Professor Cannan sees no good in a site values tax, so far at least as money spent for "beneficial" purposes is concerned. If the expenditure is economical, the occupiers or inhabitants would have to pay in the end, and if it is not economical it should not be incurred.

Professor Cannan examines in detail two or three arguments in favour of a site values rate; but he does not appear to meet the one which is most frequently brought forward, namely, that in certain circumstances a rate levied on the basis of the possible or potential, as distinct from the actual or immediate income drawn from a site would encourage building and relieve congestion elsewhere. To a cursory reader it may appear that Professor Cannan has successfully disproved this contention in the paragraph on pp. 189 and 190, but the argument which he rebuts does not seem to be the one which a skilful champion of a site values rate would employ. Professor Cannan says that a change in the method of rating, by which land worth £1,000 is reduced in value to £800, would not induce the owner to sell. Thus stated, it is true; but his supposition is that the land is being held back from the builder in anticipation of an increase in its value; and it may fairly be claimed that such a change in rating as he imagines would ante-date the point at which the owner would be willing to convert the land to other uses. If the supposition

is that the owner is making a present sacrifice for the sake of future gain, it is surely possible to shorten the process by making the sacrifice greater, as it would be if the amount immediately payable in rates were increased. To differ from Professor Cannan at this point is not to quarrel with his conclusions in regard to the desirability of using a site values tax to encourage building. The evidence that mischief is done by holding land for a rise in value is not overwhelming. Indeed, the outskirts of many towns suggest that instead of land-owners being too reluctant, they are frequently too anxious to cover their land with buildings.

Professor Cannan argues that because expenditure which is economical tends to increase the value of fixed property in the neighbourhood, this effect should be kept in view, and economy should be achieved by an attempt to secure that the property inseparably attached to a locality shall be as valuable as possible. If this be admitted, the political problem emerges as to whether present local government arrangements are well designed to satisfy the standard which is here set up. If an uneconomical rate depreciates property values, and an economical rate increases them, the occupier in a locality has but a temporary interest. All the risk is thrown on the owner, and it hardly seems to be a sufficient answer to say that it may take some time before the burden of an increase in rates can be shifted, and that in the meantime the occupier may suffer. So far as the occupiers in a locality are economists given to "long-period" views, they would be careless about expenditure, since the owners would pay for all mistakes. On the other hand, so far as they look merely to the rate demand for the next half-year, they may be uneconomically parsimonious, and refuse to venture on schemes which from the point of view of the land-owner would be altogether desirable. It is true that in most urban neighbourhoods occupiers are to a large extent owners also, but this does not preclude the objection that might be advanced against those who are only occupiers having the same voice in local counsels and the same measure of control over public expenditure as those who are both occupiers and owners.

On Professor Cannan's own premises therefore it may be possible to raise an argument that owners as such should have the principal power of deciding the amount and direction of local expenditure. If this were conceded it is clear that the cost of local services should fall in the first instance on them, in order that they might be in a position at once to decide in respect to proposed expenditure, whether the amount which they would

have to pay in rates could be recouped in the form of additional rent.

On pp. 193-196, some tentative suggestions in favour of differentiation between different kinds of property for the purposes of rating are put forward, and the succeeding and final dozen pages are allotted to a consideration of means by which the burden of "onerous" expenditure might be more equitably distributed. Professor Cannan rightly points out that the first condition of a satisfactory distribution of expenditure is a standard by which the needs of a locality may be gauged. Though he is inclined to dismiss it as impracticable, it is a question as to whether the number of houses or tenements under a certain value would not be on the whole a satisfactory, though rough, guide. Except in popular sea-side resorts and in the more central parts of London, where sub-letting is common, the single family dwelling can usually be identified, and finds recognition in the local rate books. It is true that the authorities might have an interest—for the purposes of receiving a grant—in allowing the valuation to lag behind the rent, but this would hardly counter-balance the general inconvenience caused by fictitiously low assessment values.

G. T. REID.

Principles and Methods of Municipal Trading. By DOUGLAS KNOOP, Lecturer on Economics in the University of Sheffield. (London: Macmillan & Co. 1912. xvii+409 pp. 8vo. Price 10s.)

THIS work forms a pleasing contrast to the wearisome and misleading partisan productions on municipal trading to which we have had to accustom ourselves. Mr. Knoop, like every sensible person, is "neutral" between the fanatics who think that everything that has been municipalised has been rightly municipalised and is excellently managed, and the other set of fanatics who think that nothing should ever have been municipalised and that everything which has been municipalised is worse managed than if it were managed by private enterprise or statutory companies. It is only by an unfortunate slip that he prejudices his neutrality by expressing "the general conclusion reached in this book" in the very unsatisfactory form, "namely, that municipal trading in itself is undesirable, but that nevertheless a certain amount of it may be justified, owing to the fact that in certain industries private enterprise may give even less satisfactory results

than municipal enterprise." It is difficult to attach any meaning to "in itself" in this passage, and it would appear to be just as true to say "private trading in itself is undesirable" (think of all the greed, corruption, &c., associated with private trade!), "but nevertheless a certain amount of it may be justified, owing to the fact that in certain industries State and municipal enterprise may give even less satisfactory results than private enterprise."

Mr. Knoop's attempt to define municipal trading in the first chapter appears somewhat confused, and this is probably owing to his having unconsciously tried to serve two incompatible purposes. When it is desired to explain different kinds of economic organisation in a general way, such as is (or ought to be) adopted in general economic treatises, it is well to insist on the fact that the different kinds shade one into the other by almost imperceptible gradations: from this point of view it is unnecessary to seek for an actual line of division between trading and other activities of local authorities. But when it is desired to write a book upon a particular kind of organisation, it is obviously necessary to have some definite limits. The limits must be arbitrary, and in practice the most convenient limits are those suggested by the abilities and environment of the writer and the exigencies of the publishing trade. Mr. Knoop would have done better to have recognised this and admitted it frankly, instead of involving himself in a circular argument based on an antithesis between "political" and "economic," in which "political" is applied to any service which is not chiefly paid for by special charges made to voluntary buyers, and "economic" to services "performed primarily for the benefit of individual members of the community and not for the benefit of the community as a whole, as, for example, the provision of water, gas, swimming-baths, and cemeteries." It is certainly a little surprising to be told that "the maintenance of high-roads" and "the lighting of the public streets" are political and not economic functions of government. The unsatisfactory nature of the attempted distinction is of real importance, because it leads up to the very misleading practical doctrine that the policy followed in a municipal undertaking must be governed for all time by the intentions of the council or even the ratepayers who started it. If these originators thought it would be self-supporting, it must be made to support itself at whatever cost to the consumers, rather than show a "loss" to the ratepayers: but if the originators did not think it would entirely support itself, the difference may be called by the blessed name of "subsidy," and everyone may sleep quite happily.

Clearly the root of the matter is to be found simply in the fact that people call the difference paid out of the rates a "loss" when they disapprove of it, and a "subsidy" (if they know the word) when they approve of it. However, to cut a long story short, the services with which Mr. Knoop principally concerns himself are water, gas, electricity, and tramways. These owe their predominant position among municipal trades chiefly, he thinks, because of their tendency to become local monopolies, it being generally impossible, and almost always undesirable, that there should be competition. He might perhaps with advantage have pointed out that this arises from all four of them requiring an engineering plant which lies like a network over the locality, and also that the network, whether it is all in the public streets or not, simply cannot, in ordinary cases, be constructed by really "private" enterprise, that is by private arrangements between owners of property and others which do not require the "interference" or special authorisation of the national or local authority.

In dealing with these trades, Mr. Knoop has not always confined himself to the municipal aspect, but has discussed problems such as the methods of charging for tram-rides and electricity in much the same way as they are discussed by the managers and directors of companies providing such services. No objection need be raised against this, but it involves the admission of evidence from company experience, whereas Mr. Knoop's researches have been confined almost entirely to municipal management. American tramway experience is thus insufficiently utilised. It may be said, of course, that the topography of American towns is so different from that of our own that we cannot argue from American precedents. But it must not be forgotten that suburban growth in this country is rapidly assimilating this country to America: the town population is spreading itself thin in a way undreamt of forty years ago. An inquiry into the question how far the slowness of the London trams compared with those of New York and Chicago is due to topography, the Board of Trade, the Metropolitan Police, and the long stoppages due to halfpenny fares and consequent short rides, might have afforded much profit.

Mr. Knoop is very strongly of opinion that municipalities should provide a sinking fund for paying off the capital of their trading undertakings as well as a depreciation fund for keeping that capital intact by replacing everything which will wear out or may become obsolete. He only supports this view with some hackneyed and meaningless phrases about future

generations paying for the present, and does not attempt to explain why no one expects a company to pay off its shareholders or even its debenture stockholders. I am not at all convinced of the desirability of the present generation paying higher rates or higher charges for its gas in order that the next may have gas cheaper or pay less rates; and which is it to be? When the gasworks capital is all paid off, is gas to be supplied merely at current cost of production, or is the surplus which now provides interest and sinking fund to be applied entirely in relief of rates? Moreover, supposing the principle to be adopted, does it not obviously mean that all the less profitable enterprises which are not expected to be able to pay off capital as well as pay ordinary interest on capital and provide for its maintenance must be left to private enterprise, and is the carrying out of such a doctrine likely to lead to good results? Mr. Knoop and his friends remind me of the proverbial hen which has been foster-mother to ducklings. The essence of trade is the taking of risks, and if municipalities are to trade at all, it is no use to stand cackling on the bank, "Take no risks!" The owners of the fixed property in a locality, who are the ultimate risk-takers in a municipal enterprise whether it is paid for by special charges or by rates, are generally quite as good a body to take risks as shareholders in companies: "Manchester," for example, was a much better body to stand the risk of the Canal undertaking than the shareholders who at first undertook it. We may ask, too, why the rule of providing both a depreciation and a sinking fund is only applicable to the trading undertakings of the municipality and not to the other undertakings, for Mr. Knoop is apparently quite content, so far as sewers are concerned, with a sinking fund based on the probable life of the plant, which, as he insists (when dealing with trading enterprises), is really only a depreciation fund. Why is what is good enough for the sewer not good enough for the waterpipe, when the waterworks happen to be a municipal trading institution? Presumably, in Mr. Knoop's opinion, even a municipal waterworks need only have a depreciation fund so long as the municipality makes no special charges for water; but the moment it calls part of its rate a water-rate, and thereby puts the waterworks within the charmed circle of municipal trading, it is bound to provide sinking fund as well, or it becomes an iniquitous burdener of future generations!

Probably the most useful parts of the book will be found to be the description of German municipal trades. Profits are much greater there than here, but it is not clear whether this is due to better management, higher charges, or more favourable natural

or historical circumstances. The last of the trio should not be forgotten, as it often is; the natural features of a country are bound to affect not only its railways and its canals, but also its waterworks, its gasworks, and its electricity supplies: and if anyone doubts the effect of historical circumstances, he need only compare the charges and profits of the three or four English towns which have always possessed their own waterworks with those of towns in similar natural circumstances which have bought the waterworks from companies.

If the difference is the result of better management in Germany, the question that presents itself is whether the better management is due to the professional element in the German councils, to the less democratic constitution of the towns, or to the absence of the fanatical adherents and opponents of municipal trading. Mr. Knoop certainly does not tell us all that it would be good for us to know, but he shows the way to a fruitful field of inquiry, and we should be grateful to him for having taken the subject of municipal trading beyond the controversial pamphlet "for" and "against" stage.

EDWIN CANNAN

The Railways and the State. By FREDERICK W. PIM. (London: Fisher Unwin. 1912. Pp. 302. Price 5s.)

It cannot be said either that Mr. Pim has been happy in the choice of a title, or that his book is *felix opportunitate natus*. The author is not only Chairman of one of the principal Irish railways, but also a well-known man of business in Dublin, and Vice-President of the Dublin Chamber of Commerce. He is, therefore, entitled to be listened to with all respects when he discusses Irish railways. But Mr. Pim has expanded his book, we think, unnecessarily by dealing with foreign railway systems, with which his personal acquaintance is, in his own words, "neither profound nor very extensive." And here we will not attempt to follow him.

Confining ourselves to Mr. Pim's real subject—Irish Railways and the State—we are afraid that the book unfortunately lacks actuality. The reports of the Vice-Royal Commissioners, discussion and criticism of which form the bulk of Mr. Pim's work, are now more than two years old. And as they were still-born from the day of their appearance, it was hardly worth while publishing a book to criticise them. It is safe to say that neither the report of the four Commissioners who recommended nationalisation, nor

the report of the three Commissioners who objected to it, convinced a single person who was not convinced before. And it is further safe to say that, when the question of Irish railways does come up for treatment—and that it deserves attention the reviewer would be the last to deny—it will not be solved on the lines either of the Majority or of the Minority report, even if the latter be amended and modified in the direction suggested by Mr. Pim.

The truth is, though, as far as we have noticed, the phrase "Home Rule" does not occur within the covers of Mr. Pim's book, it is useless to blink the fact that Home Rule dominates the entire situation. When the Commission reported in 1910, the introduction of a Home Rule Bill was too immediately imminent for it to be possible that the British Government should deal separately with one corner of the question, or that the Nationalist Members of Parliament should desire them to do so. As for the recommendation of the Minority, to encourage, and, if necessary, to compel, the amalgamation of the railway systems in private hands, that was even more out of the question; for undoubtedly Nationalist sentiment in Ireland favours State ownership even more strongly than the sentiment of the big business interests continues to support private management: so naturally nothing was done. And nothing will be done till the Home Rule controversy is settled one way or the other.

Regarding the matter, however, not as one of practical politics, but as one of purely academic interest, Mr. Pim is on strong ground in criticising both the Minority and the Majority Reports. The essence of the Majority scheme was to entrust the direct control of the Irish railways to a popularly elected body, though all history shows that the fundamental difficulty of State management in a democracy has arisen from the efforts of popular representatives, each to obtain for his constituents somewhat more than their share of the good things which the railway administration has to distribute. Indeed, Australian railway history is mainly a record of the attempts, more or less successful, to interpose and retain a buffer, in the shape of a more or less independent Commission, between the people's representatives, on the one hand, and the railway revenues, on the other. And the Australian States are at least homogeneous, and are free from the special Irish difficulty, namely, that the additional revenues urgently required for the development of the backward Catholic counties of the South and West could only be obtained from the surplus income of the prosperous Protestant community of the North-East.

On the other hand, should any Irish Government hereafter

decide to amalgamate the railways, while leaving them in private hands, there can be little doubt that they will take measures to that end more active than those recommended in the Minority Report. Whichever way, therefore, the Home Rule question is settled, when it is settled, the Irish railway problem will present itself in a new light; and money-market conditions and everything else will probably be quite other than they are to-day. When that day comes, and the main outlines of a scheme have been laid down and substantially accepted by public opinion, Mr. Pim's railway experience and financial skill will doubtless be both valuable and valued in working out its details.

W. M. ACWORTH

Insurance versus Poverty. By L. G. CHIOZZA MONEY. (London : Methuen. 1912. Pp. 396. 5s.)

MR. CHIOZZA MONEY first deals with some general questions touching insurance, and then gives a detailed exposition of the National Insurance Act, which is explained in a series of chapters and is also printed in full, with further comments. The following are, briefly, some of his principal points.

Compulsion enters in many ways into the life of the workman and workwoman of to-day--the cotton worker who, morning after morning, noisily hastens along the same street to the same mill; the clerk who hurries to catch the same morning train to get to his work; and a multitude of other cases. The compulsion of democratic law differs radically from economic compulsion, and may be used to mitigate, perhaps to annihilate, the latter. It is a necessary instrument of social progress.

Much has been done for insurance by Friendly and other societies and by trade unions. Statistics are given of their work. But these effects leave much to be desired. Lapses are exceedingly numerous. A large number of societies are not solvent. Collecting societies spend a large proportion of their collections on collecting.

Medical service given to the working classes is often lamentably defective. As to pay, some particulars are given of the report of the British Medical Association in 1905 on contract practice--rates of remuneration received; rates desired: comments of individual doctors. Mr. Money remarks (p. 97)--"Whether six shillings is enough or not may be reasonably in dispute; it cannot be in dispute that working men and women have not paid anything like six shillings in the past."

A brief sketch is given of German insurance. The German scheme of accident insurance is commended as against the English system of compensation. Strangely enough, Mr. Chiozza Money does not deal with the curative treatment given by the Invalidity Insurance Authorities. He gives a too rose-coloured view of German insurance. Incidentally, it may be mentioned that it is not correct, as Mr. Chiozza Money seems to imply, that the sickness societies give milk and special diet as a matter of course when ordered by the doctor (p. 48.)

As regards the English scheme, the author regrets that the benefit is not larger; that concessions are made to persons who engage casual labourers provided this is done through the labour exchange; that, under certain conditions, contributions may be returned to a man when he reaches sixty years of age. He commends the adoption of the Ghent system in the English scheme to supplement the compulsory insurance.

The book in the main is an exposition and a defence of the National Insurance Act. As becomes the work of a strong politician, it is tinged with some partisan feeling, and is, in some ways, a political pamphlet, though long for the purpose. The exposition is characterised by Mr. Chiozza Money's lucidity. His method makes for repetition, but this is not altogether a disadvantage in dealing with so intricate a subject. It may fairly be said that, if a person fails to understand the Act after reading the book, it will be the fault of the reader, not of the author.

As to whether the author fully appreciates the problem of insurance, there is room for difference of opinion. He seems to underrate the difficulties and not to appreciate some of the deeper problems involved. He skims lightly over the question of compulsion. It is, of course, true that, under the existing economic system, compulsion is in effect enforced at many points. But though this may make persons more amenable to legal compulsion, it does not necessarily justify it. The question of legal compulsion and its limits has yet to be thrashed out. It may yet be found that in many social matters compulsion is no better than, let us say, compulsion in religion.

To instance another matter. The author strongly deprecates the societies' investing their reserves for themselves. "It is earnestly to be hoped, however, that Approved Societies will have the sense to leave such moneys in the hands of the Commissioners for investment" (p. 266). The investment of funds is closely restricted in the Act. Under these restrictions, for which there

is admittedly much to be said from the point of view of security, it may be as well that a society should leave investment to the central authority. But there are many who, while realising the risk, would have liked, on broad social grounds, to have seen more freedom given to the societies. Under prevailing conditions, command over capital is in a measure command over life. Workmen are handicapped by want of command over capital. Their main source of capital is the money saved by them for the contingencies of life. These sums, used as capital by organised groups, might be a great lever to raise them to higher levels, and, what is certainly of not less importance, to assist them to work out their own salvation in their own way.

The title of the book betrays, I think, a conception of doubtful validity. If by poverty the author means to include all persons with incomes below £160 a year (p. 143), it would need perfervid enthusiasm to believe that an insurance scheme in itself will radically affect the question. If, on the other hand, he means poverty in its usual significance, as covering persons very badly off, on the verge of or in pauperism, then I would submit that an insurance system may be splendidly successful and yet not reduce this low level of poverty very much. In fact, it may be suggested that it is a condition of social well-being that each generation should deposit outside the normal course of free life, and deposit effectively, though with humanity, its layer of failures. The experience of Germany lends no warrant to the hope that the cost of public dependence will be much reduced.

I have referred to a few details for illustration. More important is it to ascertain the point of view from which an able publicist like Mr. Chiozza Money writes. His standpoint seems to be essentially materialistic, if I may use the term without in the least implying abuse or slight, but simply to indicate that outlook on life which has regard to the material surface of things and not to the inner life, inner not in any mystic sense, but in the meaning of the life of thought and feeling and mind generally. Mr. Chiozza Money and the school to which he belongs are direct descendants of the utilitarians, done into twentieth-century doctrine; it is the same spirit, materialised in modern humanitarianism. Their outlook is quantitative rather than qualitative. They are impressed by the machinery of life and by its counters. They are too apt to regard life as though it were a matter of mechanical adjustments, forgetting that permanent material prosperity is conditioned, and conditioned severely, by qualities

of mind and character, and that, in fact, these latter are the things which fundamentally count.

Against this underlying principle arose in the course of the last century the doctrine of self-realisation. And to-day in the social sphere we see arising a vigorous school of thought with the same bent, translating this doctrine into social terms. It may seem a far cry from questions of insurance to those of philosophy. They are, nevertheless, essentially connected. Even the apparently simple problem of how to secure sufficient of the wherewithal of life to men and women cannot be permanently solved by rule of three. And though consideration of the deeper issues of social problems too often leads to obscurantism and reaction, that should not hide the fact that those issues must be considered if a satisfactory solution is to be found.

I. G. GIBBON

Social Insurance in Germany, 1883-1911. By W. HARBUTT DAWSON. (London : Fisher Unwin. 1912. Pp. 283. 6s.)

THIS book is mainly a statement of the German compulsory insurance laws—accident, sickness, invalidity and old age, &c.—as amended in 1911, and of the new law passed in the same year providing for the compulsory insurance of employees on salaried staffs. Some particulars are given of insurance in Germany before the passing of the imperial laws, of the crusade against disease, of the cost of insurance, and of the opinions of employers and employed. The book contains some photographs of sanatoria and of devices for lessening the crippling effects of accidents.

Mr. Dawson shows that compulsory insurance already existed to a considerable extent in Germany when Bismarck introduced his schemes to dish the socialists. As to the amendments effected in 1911, the main are :—

Sickness.—Insurance made compulsory for agricultural workers, domestic servants, and casual labourers (with special conditions). Income limit under which non-manual workers compulsorily insured raised from £100 to £125 per annum. Some changes made in the kind of societies through which insurance may be effected; larger minimum membership required (though still low). Power of insured persons in administration curtailed in certain respects. Sickness insurance brought under the supervision of the Imperial Insurance Office.

Invalidity and Old Age.—Survivor (widow and children)

pensions added to the invalidity and old age pensions, contributions being raised for this purpose ; imperial subsidy also given.

Accident.—Little change. Alteration in the arbitration authorities for deciding appeals. The income limit below which insurance compulsory as regards foremen, technical employees, &c., raised.

The compulsory insurance for salaried staffs is a new departure. The compulsion applies to employees earning not more than £250 a year. The benefits are similar to those granted under the invalidity, old age, and widow and orphan insurance for workmen. But there is a wider and higher range of pensions. Contributions are paid in equal shares by employers and employed. The Imperial Government does not give any direct subsidy. The management is to be largely under the control of a central authority, with local committees ; it will be decidedly bureaucratic.

The results achieved through the insurance schemes in the improvement of health and the prevention of accidents are highly praised. The burden of contributions on employer and employed is calculated, partly on the rates of contribution, partly on the more valuable basis of wages paid by some firms. The opinions of some employers and workmen's representatives are 'quoted in confirmation of the good results of the insurance laws—most of the employers' opinions have already appeared in the White Paper issued by the Government—and the change in the attitude of the Social Democratic party from hostility to support is also noticed.

The book provides a useful statement of the legal provisions of the new insurance laws. Corresponding provisions of the English law are also stated, and thus it is possible to compare the two. Some interesting facts are given respecting the operation of the old laws, especially as regards costs.

But one misses independent analysis of results, and that, I think, is what is most needed at the present time. The opinions of employers and of working-men leaders may be interesting and suggestive. But they do not carry us far enough. What is wanted is a comprehensive statement of facts and a searching examination of them.

Mr. Dawson apparently thinks that German insurance has been brilliantly successful ; a close scrutiny of results will give a more tempered conclusion. The book gives little inkling of some of the problems which arise when an impartial endeavour is made to assess the results of German insurance. Thus, take the

crusade against disease. It is safe to say that at present the standard of health in this country is at least as high as in Germany. The figures of the German sickness insurance societies do not indicate that there has been any marked improvement in general health. As a matter of fact, the average days' sickness per member has on the whole risen in the later years; but to get at the real significance of this would need an examination of the terms of benefit, which in many cases have been made more favourable to the insured.

And, of course, in assigning the cause of any improvements which may have been effected, it is imperative to remember that since the insurance laws have been in force great strides have been made in Germany in other directions towards improving health, especially in public health work.

Or, to be more particular, take the measures against tuberculosis. It must be remembered that not very much was done by the insurance authorities against tuberculosis specially until about the beginning of the present century. But the death-rate from tuberculosis had been rapidly falling in Germany, as in other countries, long before this. The statistics of the sanatoria, excellently compiled though they are in many ways, need close analysis. It is undoubted that in the past many cases have been treated which were not tuberculous, or which were only latently tuberculous, and did not need sanatorium treatment. Moreover, cases are received at early stages, and it is well known that a large percentage of such cases get well without special treatment. The measures taken against tuberculosis have been very costly. It is significant, too, that recent efforts in Germany are directed rather to the dispensary system than to sanatoria; and this movement, while liberally supported by, is largely independent of, the invalidity insurance authorities.

Mr. Dawson is probably right in thinking that there is a tendency to exaggerate the existence of deliberate malingering. But there is another evil with which he does not deal, that of valetudinarianism, the imagination of non-existent, or the exaggeration of existing, ills, a danger very much graver than that of deliberate malingering, and a danger which Germany has not escaped.

Then again with regard to the question of poverty. Undoubtedly the fathers of the insurance laws hoped that poor law charges would be substantially reduced. Mr. Dawson quotes Bismarck: "The end I have in view is to relieve the parishes of a large part of their poor law charges by the establishment of

an institution, having State support and extending to the whole Empire, for the maintenance of old and infirm persons" (p. 14). For comment I would refer to an article in *THE ECONOMIC JOURNAL* of June, 1911, in which I gave some particulars of, and commented on, the large increases in recent years in poor law charges. There are many reasons extraneous to insurance why poor law charges have increased, and it may be true, as many able and experienced apologists have held, that the increases are in despite of relief afforded by the insurance schemes. But this remains to be conclusively proved. As I have stated elsewhere, it does not seem to me that an insurance scheme is necessarily a failure because it does not reduce public dependence.

A close and careful examination of the experience of German insurance should yield results invaluable for this country in regard to the new measures of insurance which have been undertaken. The lessons of German successes and failures need to be extracted and learned. For this purpose I am afraid that Mr. Dawson's book, though useful in other ways, is not of much help.

I. G. GIBBON

The Progress of the Nation, in its Various Social and Economic Relations, from the Beginning of the Nineteenth Century.
By G. R. PORTER. A completely new edition, revised and brought up to date by F. W. HIRST, Editor of *The Economist*.
(London: Methuen, 1912. Pp. xvi + 735.)

THE crop of valuable statistical blue books and buff books issued since 1903 by the Board of Trade has already been so plentiful that it was a happy idea of Mr. Hirst to have their richest grain garnered, under his supervision, by members of the staff of *The Economist*. But whether it was altogether the best plan to tack their work on to a number of selected and abbreviated chapters and paragraphs of Porter's classical treatise, and call the combined result a new edition of Porter's *Progress of the Nation*, may perhaps be doubted. In the first place, we lose by this procedure the full flavour both of Porter and of Mr. Hirst. The first writer opened his treatise—as early as 1836, be it noted—by the confident assertion that "this country and . . . the present generation . . . have . . . made the greatest advances in civilisation that can be found recorded in the annals of mankind." According to the later writer, "It may be gravely doubted whether 'the Progress of the Nation' is not a misnomer, if the condition of the working classes from, say, 1794 to 1844 be impartially

surveyed." Porter was dominated by the thought of the great mechanical improvements of the age. He writes in 1836 :—"It is to the spinning jenny and the steam-engine that we must look as the true moving powers of our fleets and armies, and as the chief support also of a long-continued agricultural prosperity." Free trade, in which, of course, he was an ardent believer, would, in his view, only swell the already rising tide of progress. To Mr. Hirst, on the other hand, freedom of trade is the one thing that matters; and 1846 stands out in his mind as the date of entry into the Promised Land. It is a pity that Mr. Hirst has not felt free to develop his own thesis in his own way; and it is a pity also that those who make the acquaintance of Porter for the first time in this new conjunction should miss in these pages some of his most characteristic utterances. The editor has indeed, in some cases, been even too tender in the employment of the pruning-knife. But Porter's forecasts are sometimes too palpably in conflict with subsequent events to be allowed to remain. If anyone has access to Porter's original work—it can easily be obtained for four or five shillings—and will compare, for instance, the opening of his chapter on Agriculture with the "condensation" in Mr. Hirst's volume, he will discover that the first sentence has disappeared from the abstract at the head, and the first two paragraphs have fallen away from the text. The sentence is: "Impossibility of importing any large proportion of food for the population"; and the opening passage of the text ran thus: "In every country the condition of its agriculture must be a subject of the very first importance. An inconsiderable state or colony may, it is true, without much danger or inconvenience, exist under circumstances which oblige it to be habitually dependent upon the soil of other countries for the food of its inhabitants; but a very little inquiry and a very simple calculation would suffice to convince us that this can never be the case with a numerous people."

Again, in the chapter on Foreign Commerce, the sentences are allowed to remain which were inserted in the 1847 edition, and in which, *à propos* of the Repeal of the Corn Laws, Porter remarks: "It is not conceivable that our example, which on all other occasions have furnished motives of action, should cease to do so. . . . Shall we too greatly flatter ourselves if we hope that the nations of the world . . . shall be brought to see and act upon the conviction that the happiness and prosperity of each must tend to increase the happiness and prosperity of all other nations?"

"Hope springs eternal in the human breast," as this matter

of Free Trade and English example has sufficiently illustrated; and it is good to be reminded of the happy confidence of our grandfathers. But, from this point of view, one cannot but regret the omission of the fine sentence (written in 1836, but retained in 1847) which almost immediately follows: "It would be absurd to suppose that in a state of things such as has here been contemplated" (*i.e.*, "full freedom to the productive industry of the country in all its branches"), "with a constantly increasing number of customers, our agriculturists must not share in the general prosperity, and that they should, *under any circumstances*, fail to obtain a return for their capital and labour equal to that realised by all other classes in the community."

Even the omission here and there of a phrase, or the alteration of a single word, is enough to rob Mr. Porter's writing of its "fine careless rapture." Thus how cold is Mr. Hirst's version of the effect of the Jacquard loom, "Our weavers were enabled to produce fancy goods of high quality," compared with the original of Porter: "Our weavers are now enabled to produce fancy goods, the quality of which is, with a few exceptions of little importance, fully equal, and, as regards some sorts, superior to the quality of goods made in France"!

The silk industry, by the way, furnishes an instructive example of the method of this new edition. The writer of the sequel to Porter's section on silk, a sequel dealing with the period since 1850, makes a gallant attempt to prove that the Cobden Treaty of 1860 did no permanent harm to the silk industry of England, and makes great play with certain assertions of Mr. Matthew Blair, "a well-known authority." The reference, the reader may like to know, is to Mr. Blair's contribution to the interesting volume edited by Mr. Harold Cox in 1903 under the title of *British Industries under Free Trade*—a volume of which Mr. Hirst's staff has freely availed itself. But even *The Economist's* staff must have found it impossible always to live up to Porter's cheerful prognostics. And so the following passage (in the 1847 edition) disappears: "Even if our silk manufacture had been left without the so-called 'protection' of any duty at all, there does not appear reason to doubt that it would not only have stood its ground among our principal branches of industry, but that the skill of our artisans would have enabled them successfully to rival those of other countries."

The new matter added by Mr. Hirst's assistants is of various degrees of merit. Mr. Hirst tells us in advance, in a preface that displays his high opinion of his collaborateurs, that he does not

expect every expert to be satisfied with the space and treatment of each particular trade; and he pleads the novelty of the attempt thus to survey all the leading trades of the country, as a reason for indulgence. It is perhaps uncharitable after this to remark that in 705 pages of text, 5½ pages on Iron and Steel since 1850 are a somewhat meagre allowance. "Leather, Boots and Shoes," one notices, has 9 pages. But in the latter case a contribution to *British Industries under Free Trade* by Mr. Day furnished, it would seem, more convenient material wherewith to rebuke Tariff Reformers than was easily accessible in the case of Iron and Steel.

Those chapters are the most complete which are happily outside the tariff controversy. This is the case with the first nine, which deal with population, occupations, wages and employment, pauperism, housing, crime, intemperance and lunacy, education, local government, and the standard of comfort. "This preliminary survey was contributed mainly by Mrs. Hamilton, Mr. C. M. Atkinson, and Mr. W. T. Layton, on whose competence to deal with questions of local government, criminology, wages and prices," the editor handsomely assures us, "there will be no dispute." And these sections will certainly be found useful places of reference by many a grateful student. Gratitude would have been enhanced if references could have been given throughout to the sources of information. The latter merit will perhaps cause the recent "new edition" of Mulhall (another case of misnomer) to be preferred by cautious readers. For though "the figures—taken from official sources—have been so carefully tested and revised," the editor assures us, "that errors must have been reduced to a minimum," even a hasty examination of a few pages at random creates some disquietude. Thus on p. 351 there is a table giving "the total value of our exports of silk manufactures every ten years since 1850," showing that in 1910 they were bigger than ever. I have not at hand the official figures for 1850; but on looking up a series of Statistical Abstracts for the later decades, I find that those given in Mr. Hirst's volume for 1860, 1870, 1880, and 1890 are for "silk manufactures" in the then classification of the Board of Trade, *i.e.*, not including "silk, thrown, twist, and yarn," and those for 1900 and 1910 were for "total of silk" in the new classification which *includes* silk yarn.

May it not also be suggested that if any chapters are in fact, to all intents and purposes, the work of others than Mr. Hirst, it might have saved trouble to have placed their names at the head of each and left them the responsibility? Editorial "supervision" may easily be misleading in cases where the sub-

ordinate authors differ greatly from one another. Thus, here, p. 57 will be found arguing that unemployment has not increased of late; while p. 68 maintains that the position of the ordinary workman has become less secure. Let me add, before passing from the more or less contributed chapters, that the last in the volume, on "The Growth of Wealth and Capital," in which Mr. Hirst had "the valuable assistance" of Mr. W. T. Layton, is one of the most original, and also one of the most useful. It contains an estimate of the wealth of the United Kingdom for 1895, 1905, and 1909, drawn up upon the same general lines as as Sir Robert Giffen's well-known estimates for 1865, 1875, and 1885, though with large differences in the details of construction. One's only regret is that the opportunity was not taken to break away from Giffen's habit of identifying capital with accumulated wealth in general.

For vigour of style the reader will turn to the chapters entirely contributed by the editor himself. Among them is a chapter on National Expenditure and Debt. It is exhilarating to have the doctrine of retrenchment preached so emphatically. I find it personally easier to sympathise with Mr. Hirst's attitude here than in some other places. But I am not sure that his very facility of expression may not do a certain damage to his cause. "When we are told of "the naval scare *ingeniously organised* by Mr. Stead" and of the "agitation *fomented*" by him, one is reminded of the chapter, in a book once well known in Oxford, on the controversial use of dyslogistic terms. And when one is assured that the first steps in preparing Estimates at present "is for the First Lord of the Admiralty and the Secretary for War to find out from their subordinate admirals and generals and eagerly co-operating contractors how much public money they can possibly get rid of within the year," the effect upon the reviewer—though he wants to believe it—is to make him think that perhaps it isn't so.

W. J. ASHLEY

The Case Against Free Trade. By W. CUNNINGHAM, D.D., F.B.A., with a Preface by the Right Hon. Joseph Chamberlain, M.P. (London: John Murray. 1911. Pp. xvi+137. Price 2s. 6d. net.)

THIS little book was published last year, and has not yet been reviewed in THE ECONOMIC JOURNAL. But the postponement, which was accidental, is in some respects appropriate. For, although the volume belongs to a popular series bearing the

alluring title of "Questions of the Day," the arguments advanced therein are so far from being directed to an ephemeral aim that in most instances, looking a considerable distance backwards or forwards, they are, and, we presume, are intended by the author to be, of more than immediate validity. Dr. Cunningham, it is true, does not disdain or neglect the current reasonings of the hour, about which much of the fiscal controversy has hitherto centred, and in our judgment he has succeeded in rebutting not a little of this special pleading. But it is probable that disproportionate notice has been bestowed on such passing considerations; and the force of their rebuttal, as here attempted and achieved, is, we think, made most evident through their failure to stand the test of enduring pertinence. It is, by contrast, the continual endeavour of their critic to penetrate below the superficial appearances of the transitory moment to the more permanent underlying influences. This is, we hold, the most conspicuous, as it is the most welcome and admirable, feature of his fresh opportune contribution to the debate.

As we should expect, the economic historian in our author will not rest content without consulting the experience of the past and endeavouring to interpret rightly the meaning of the historical record. The same genuine historical spirit it is which prompts him to look beyond the immediate present to a more or less distant future, and to gauge the adequacy or insufficiency of alternative fiscal policies by their probable outcome and their final sequel. But whether he be thus revising the narrative of the past, or casting a new horoscope of the future, or whether he be scrutinising carefully the present, he pursues generally what we, at any rate, deem to be the only satisfactory method of discussing this particular question. For his examination results most often in the discovery and exposure of those fundamental bases on which the "case for Free Trade" rests in the last analysis. The method is frequently, perhaps it is generally, left severely alone by those impetuous combatants who are desirous of a quick, if transitory, triumph over their most ostentatious foes. But Dr. Cunningham is rightly anxious to inflict upon his more formidable and more stubborn adversaries other than mere flesh wounds. He would rather strike home to a vital organ; he would gain an entry into the inmost recesses of their strongholds. In this way, and only in this way, as we think, can the unsatisfying pretensions of Free Trade be most surely and completely demonstrated.

Thus it is that in different chapters the Archdeacon resolutely contends that Free Traders fail both in foresight and in insight,

that they are prone to take short and narrow views, that they fix their whole attention on the present needs of the consumer to the serious neglect of the conditions of permanent power of production, and that they even try too frequently by unworthy means to vilify, and thus put out of countenance for the time, their foes, or endeavour to capture an ignorant or prejudiced electorate by appealing to their most superficial whims and least rational notions. And thus also it is that he urges the claims of imperial duty with reference to the future, and that he exposes certain misconceptions on the big and the little loaf that have found great favour at the polls, and yet depend on what can be shown to be a misreading of the past. The Corn Laws do not, as he argues, seem to have caused, in effect, a rise in the price of wheat; they even appear to have produced, indirectly, if not directly, a state of agriculture which tended to keep the market-value of wheat low or stationary, for they stimulated or maintained its production. We were prepared to find an informed historian such as Dr. Cunningham objecting stoutly to that limited, rigid view of society as a "mechanism" which prevents Free Traders from taking constant and proper reckoning of the "bearings of the humanities on economic life." And we admire his open-minded common sense which saves him from the perverse adoption of the strange, disabling notion that, if a tax does more than yield revenue, it is on that account, and on that account alone, to be avoided and condemned. Similarly we share the opinion which he expresses, that, at the best, a Free Trade policy may lead to the result achieved, though not perhaps consciously designed, in England, of a lop-sided growth which, fostering manufacture and trade, has injured or restricted agriculture; while at the worst that philosophy of *laissez-faire*, of which it is a surviving remnant, is plainly incompatible with the judicious employment of the machinery of the State on the desirable work of "conscious co-operation." That philosophy, in truth, generally thrust aside in other departments of economic action or behaviour, would rather lead to a blind fatalism, or at any rate it would conduct to a dangerous self-complacency. Whatever is, it would maintain, is right. All is for the best in the best of all possible worlds.

This reasoned presentation of "the case against Free Trade" is kept within the compact dimensions of a handy volume. We feel so much sympathy with the standpoint from which the Archdeacon approaches the debate, with the general mode of handling the argument which he adopts, and with the particular

conclusions that he reaches, that we have little else than congratulation to offer him. It is possible that by some rearrangement the argument might have been made to follow the successive stages of an order more strictly logical than that pursued; and perhaps within the separate chapters discursiveness is not entirely avoided. But the cumulative force of the reasoning as a whole is great, and history and analysis seem to have been felicitously mingled. As Mr. Chamberlain remarks in a brief but stimulating preface, characterised by what his political opponents, no less than his devoted and enthusiastic followers, have recognised as his remarkable, happy command of terse, lucid, pointed language, "Dr. Cunningham invites us to think out again the foundations of our policy." The veteran protagonist of Tariff Reform proceeds to add that "his competence" for the task he has essayed "is unquestioned"; for, on the one hand, "no man has a more intimate knowledge of the legislative history of trade, or has studied more deeply its effects upon our people," and, on the other, "his economics are never of the dry-as-dust order," and he is "ever sensible of the great political and human forces which modify and overrule the theoretic working of economic laws."

This is high praise from a capable and shrewd, if partial, witness; but it is deserved. We have no doubt that many "convinced Free Traders" will study with care, if they continue to withhold their assent and approbation from, the arguments put forward in this bold assault on their position. To Tariff Reformers, who are no less firmly persuaded that the balance of reasoned argument, of deep philosophy, and of historical experience, inclines to their side of the scales, a statement of the "case" against their foes, which relies throughout on such rare but effective weapons of controversy, will be doubly welcome, and it will confirm the faith that they, and its distinguished author, hold.

L. L. PRICE

La Teoria della Rendita. By PROF. GUIDO SENSINI. (Rome: Loescher. 1912.)

Les applications mathématiques à l'économie politique. By DR. PIERRE BOVEN. (Lausanne: Rouge. 1912.)

THESE two volumes are the outcome, one may fairly say, of the more modern conceptions of Political Economy. It is the duty of a critic to indicate, however briefly, what these conceptions are:—First, political economy—like chemistry, or physics, or astronomy—is conceived as a natural science. Therefore

it must only be studied in the light of the experimental method, and every effort must be taken to exclude the personal element. Second, the economist of to-day has no practical end in view. He is not concerned even with the propagation of theories. His work is merely to investigate the *laws* of phenomena, to discover *uniformities* in their workings. Third, political economy is but a part—and a small part—of the more general science of sociology. It considers only one aspect of the things we see around us. To complete our knowledge we must also consult other branches of social science. Fourth, one of the chief things to remark in economic phenomena is the mutual determination of their elements. To study this aspect, only one means so far has been discovered—the use of mathematics. But mathematics is only used in order to enable the economist to arrive at a conception of this mutual determination and of its effects on economic phenomena.

It is in accordance with these principles that Prof. Sensini studies the phenomenon of rent. He pays ample justice to those who founded the theory of rent. On page 199 he writes: "Smith, Ricardo, Malthus and others have often, thanks to their genius, caught a glimpse of profound theories and given them an outline more or less distinct. Subsequent economists have very properly examined these theories, correcting, expanding or perfecting them. Such is the regular path of progress in the physico-mathematical sciences." Science, indeed, is never constant; it is a development continuous throughout. Ricardo's theory of rent has been corrected and broadened—first by Marshall, then by Pareto, now by Sensini. An important chapter of Prof. Sensini's work deals with the history of the theories of rent. He proceeds in another chapter, by far the most important in the book, to develop the new theory of rent, and adds various penetrating reflections on the whole subject of economic theory.

His criticism of the "literary" economists, often just enough, is apt to lose in persuasiveness what it gains in force. Indeed, in his treatment of one of them, Prof. Pantaleoni, he is wholly unjust. Prof. Pantaleoni is one of the best of the Italian economists.

The insight and marked originality of Prof. Sensini's work has gained him a large vogue in Italy.

Dr. Roven's book is mainly intended to clear up a mass of misconceptions prevalent whenever mathematics is applied to the study of political economy. One of the chief confusions of this sort lies in the classing together of all economists who make use,

of mathematics; whereas the differences between them are commonly fundamental. Indeed, it is not unusual to find their theories mutually exclusive.

Dr. Boven gives a new and original analysis of a book entitled "A Treatise on Wealth," thought to be the work of A. N. Isnard. It was published in 1781 at London and Lausanne. The name of Isnard is hardly known, but he has anticipated, without recognition, several modern theories. "Certainly Isnard is a scientific thinker," says Dr. Boven, on page 57. "His method of stating problems shows this clearly. He has a very exact idea of the interconnection of economic facts. He satisfies himself that the question of value is one of quantity, not quality, and then proceeds to apply the algebraic method to the matter in hand."

In the work of Walras, Dr. Boven has done well to distinguish where the writer is being scientific and where he allows his personal opinion or his sense of style to run away with him. With equal acumen Dr. Boven has pointed out how, in this respect, Walras and Pareto are radically different. In fact, those who wish to have a clear and summary account of the latter's view without entering into too much detail, should consult Dr. Boven's book rather than the original. Other theories of the mathematico-economists are distinguished with similar success, and though many writers still persist in treating them as a homogeneous whole, they stand at last distinct and in their proper classes.

VILFREDO PARETO

Cours d'Economie Politique. By GEORGES BLANCHARD. (Paris : Pedone. Vol. I. Pp. 712. 1909. Vol. II. Pp. 907. 1912.)

THESE two bulky tomes contain a course on Economics, intended for law students. The general scheme of the whole deserves all praise; it is logical and comprehensive, just what we should have expected from a French writer. Thus, after dealing with the general doctrines of population, the author goes on to discuss the movement of population (with statistics), immigration and emigration, and naturalisation. But this excellence is inseparable from a radical weakness which, to some extent; lessens the value of the work. The fact is that it treats of too many subjects to allow of adequate consideration of them all—even in sixteen hundred pages. It is more of the nature of a small encyclopædia than of a treatise. From the history of

sumptuary legislation to the theory and practice of colonising, from social hygiene and old-age pensions to poor relief, insurance and paternity laws—one may find some information at least on almost every topic either of primary or secondary interest to the student of economics. We have tested the work from this point of view, and are bound to confess that the completeness of the subjects is almost perfect. An account of Syndicalism might have rounded it off perfectly, though, it must be added, the general strike is not left unmentioned.

From what has been said it will be evident that these two volumes are concerned more with descriptive than with theoretic economics; that though theoretic principles are discussed, more attention is given to the descriptive aspect of the subject. This is no reflexion on the author, whose aim appears to have been to provide a text-book for students of law, in accordance with what the French public authorities prescribe for this class; and on the whole he has accomplished his task with great credit.

One feature of the work that will assist students in their reading is the division and sub-division of categories. An instance or two will suffice by way of illustration. In the Introduction a section is devoted to modern schools of political economy. First we are introduced to the Liberal School, and as sub-divisions of it, to the mathematical and the Austrian schools respectively. Secondly, the Socialist School, with its two branches, Communism and Collectivism, are dealt with; and lastly, the schools which occupy a position between these two—that of social reform, connected with the name of Le Play, and the Catholic School, so closely akin to it (both desiring to restore the influence of religion in the State, of the employer in the workshop, and of the father in the home), the historical school, the school of State Socialism, and the school of social solidarity, with its doctrine of the quasi-social contract, promulgated by M. Léon Bourgeois. Or to take a second example. Colonies are divided into five kinds: (1) purely political (*i.e.*, penal settlements); (2) commercial colonies (Hong-Kong is instanced); (3) plantations and fishing-stations; (4) colonies that serve to drain off the surplus population from the mother country, and (5) those that partake of the nature of all the previous ones.

On the question of Free Trade *v.* Protection, the author very properly points out that no general answer can be given; each country must decide for itself; and that while one land may flourish under Free Trade, another will find prosperity only under Protection. The treatment of this important topic is in accord

with the author's general method; he has tried to be scientific, and in most cases gives the views on both sides concerning any matter in hand. But he does not stop there; he generally indicates in what direction his own feelings tend. So it is interesting to find that he ranges himself on the side of Free Trade, which he regards as the ultimate goal of civilisation.

As an introduction to the study of economics, the work of M. Blanchard may be recommended for its clear information on so many topics. It is certainly a moot point whether the intensive or the extensive method of study is best for the beginner in economics; whether, that is, he should strive to obtain a more or less thorough mastery of each important division of the subject in turn, or cover the whole of the ground in order to know his bearings. In the second case we can conceive of no better textbook than M. Blanchard's. It lacks only one thing—a bibliography, which is as essential to the student as a sign-post is to the traveller. Moreover, English readers will find it useful for reference on many aspects of French social legislation and social tendencies. On English conditions the author, though brief, is quite sound; but he invariably speaks of *shellings*.

• There is a long appendix wherein many points in the text are illustrated by instances from the economic system of Egypt.

M. EPSTEIN

The Principles of Scientific Management. By FREDERICK WINSLOW TAYLOR. (New York: Harper. 1911.)

Scientific Management: Tuck School Conference, Dartmouth College. (Hanover, V.H., U.S.A.: Amos Tuck School. 1912. Pp. xi + 388. \$2.50 net.)

Increasing Human Efficiency in Business. By PROFESSOR WALTER DILL SCOTT. (New York: Macmillan. 1911. Pp. 339. 5s. 6d.)

Fatigue and Efficiency. By JOSEPHINE GOLDMARK. (New York: Charities Publication Committee. 1912. Pp. xvii + 302 + 591. \$3.50.)

THESE four books all deal with what claims to be a new science, and all come from America, where that science was born. It is the science of Efficiency in business, particularly the efficiency of production. Its founder, Mr. Taylor, the writer of the first book, calls it the science of management, and he claims that it is a true science because it rests "upon clearly defined laws, rules,

and principles as a foundation"; and further that "the fundamental principles of scientific management are applicable to all kinds of human activities." The second book is a very interesting report of papers, speeches and discussions on scientific management at a conference held in 1911 at the Amos Tuck School of Administration and Finance. The other two books are concerned with what is really only a branch of this science, namely, the psychology of labour. Professor Scott has made a careful if rather diffuse analysis of the psychological causes of efficiency or inefficiency of workers. Miss Goldmark has made an exhaustive study of the relationship of fatigue and efficiency, especially in women workers.

Mr. Taylor's is a remarkable book. It is written by a man who began life as a common labourer, who worked as pattern-maker and machinist, and eventually became chief engineer in a great steel works. It shows a power of imagination, a concentration of thought and language, which not only make it fascinating for anyone to read, but also, in a way, which is rare in this kind, or perhaps any kind of book, leave in the mind of the reader an indelible impression of what the writer thought important in his views. And there can be no doubt in the reader's mind after he has read the book that those views are of the utmost importance to the employer, the manager, the worker, and the economist.

Mr. Taylor sets out to prove three points: first, that almost every daily act is performed inefficiently by us, and that great loss results from such inefficiency; second, that the remedy for the inefficiency is to be found in systematic management; third, that the best management is a science. Not the least interesting part of his proof consists in the psychology of labour which he presents to us. He shows, first, that the ordinary systems of production and management, and especially piecework, universally result in underworking, or "soldiering," *i.e.*, deliberately working slowly so as to avoid doing a full day's work. This, of course, is deliberate inefficiency. But there is another cause of inefficiency over which the workman has no control. Under the best system of unscientific management the final responsibility for the way in which he is to do his job is left to the workman, and the workman uses rule-of-thumb methods which he has imitated from other workmen. Now, the American business man has discovered a great truth: that no man understands his own business. "To the man who says to me, 'I know my own business,' I say in my own mind, 'God help you!'" were the words of a large manufacturer at the conference at Dartmouth College. Mr. Taylor

applied this truth to the simplest work of the unskilled workman : he found that the most efficient way of doing even the simplest act can only be discovered by scientific study, often of a most elaborate nature : the man who is doing the act almost invariably has neither the time to investigate nor the intelligence to understand it.

The ordinary system of good management Mr. Taylor calls the "incentive and initiative" system. The manager attempts, by giving some special incentive, *e.g.*, pay, hope of promotion, &c., to induce the workman to use his traditional knowledge, skill, goodwill, &c., *i.e.*, his initiative. Scientific management, on the other hand, proceeds on four principles :—First, the development of a science for each element of a man's work ; the object of this science is to arrive at standards of productivity of machinery, material, and men. Second, the scientific selection of machinery, material and men, and the training, teaching, and development of the men. Third, co-operation with the men, so that all work is done in accordance with the principles of the science which has been developed. Fourth, redistribution of responsibility between the management and the worker.

. The difference between the two methods and the results obtained by the adoption of the scientific principles are well shown in an example given by Mr. Taylor, the handling of pig-iron. The handling of pig-iron is unskilled labour of the most elementary kind. The labourer "stoops down, picks up a pig weighing about 92 pounds, walks for a few feet or yards, and then drops it on to the ground or upon a pile." There were 80,000 tons of pig-iron to be handled in the Bethlehem Steel Company, and a gang was loading on an average about $12\frac{1}{2}$ tons per day per man. The first step taken was a study of what Mr. Taylor calls the science of handling pig-iron. One of the most important laws of this science is the law that "for each given pull or push on the man's arms it is possible for the workman to be under load for only a definite percentage of the day," *i.e.*, where each pig weighs 92 pounds the percentage is 43. Further, if an average workman worked "at an even gait," *i.e.*, working and resting at proper intervals in such a way that he was under load for 43 per cent. of the day, he ought to handle not $12\frac{1}{2}$, but 47 to 48 tons per day. The management then carefully selected and trained workmen to work in this way. The results were :—

(1) That the pig-iron was handled at the rate of 47 to 48 tons per man per day, an increase in efficiency of between 300 and 400 per cent.

(2) That the workmen earned under the new system \$1.85

is under consideration in other provinces of Austria, have prompted Dr. Perin to make a study of the whole question, both in the development of its theory and in the details of British and German legislation, with the special object of ascertaining what lines of action are best suited to Austrian conditions. He considers that social policy has been far too prominent as a motive force in legislation, and that the question became practical politics before its scientific basis was thoroughly thought out. Its first conception received a false bias through the peculiar land conditions of the country of its origin. It is not difficult to acquiesce in the view that this classical English doctrine was too readily received as dogma on the Continent, and that no conception can be satisfactory which does not emancipate itself from the original limitations. The development of the idea is sketched briefly, but with wide reference. There is a welcome note upon the contribution of William Ogilvie to the subject, in his "Essay on the right of property in land," in 1782, which is not generally familiar to English readers. After a careful attempt to apply the analysis of the theories of distribution to the taxation problem, illustrated particularly by Mr. Hobson's contribution to the subject, which is found, considering its elaborate apparatus, to be disappointing in practical value in this respect, Dr. Perin deals with specific classes of increment. In agriculture, the particular case of values enhanced through protective corn duties, and unearned, is very frankly treated, and in building-site speculation the earned character of much of the profit is rightly insisted upon. The description of the English system, considering the space devoted to it, is particularly good, but criticism is surprisingly meagre—it is almost confined to comment upon the powers conferred on the Commissioners of Inland Revenue in matters of small detail. But he considers that our system succeeds as little as others in distinguishing purely unearned (*chemisch-rein*) increment in general. The treatment of incidence is not distinctive, and is confined to the consideration of the settlement of tax upon an increment *fully realised*, that is, the actual disposition of duty due and payable; it does not touch the influence of prospective liability upon present market values. Coming to the chapters devoted to Austrian conditions, we obtain many interesting lights upon Home Rule finance in being. The central government has circulated two model proposals (on German lines) amongst the provinces—an action criticised by the author, as Imperial sanction and control is now reduced to a mere formality until 1918, when, if the central govern-

ment attempts to resume control, claims for compensation, according to past experience, will complicate and embarrass the position. The local governments are already too independent in finance, and this action has merely played into their hands. The central treasury, half afraid of the new tax, as to its practicability and yield, will have ultimately to pay for getting the provinces to take the risks of experiment; it would have been better to preserve intact whatever could still have been saved for unified financial administration, meeting the claims of the provinces by sanctioning local supplements or percentage additions (*Zuschläge*).

Dr. Perin's ideas are eminently logical and eschew all slipshod methods. The Austrian problem must be attacked by an extension of pure betterment principles as far as they can possibly be applied, by a reform of existing taxes on land, and by a careful manipulation of income tax to cover all real speculation profit—that is, the existing field of apparent, or gross, increment must be covered as far as possible by extending appropriate existing methods, leaving the net and economic unearned increment to be attacked by a special impost, which must not be a mere “hanger-on” to the rest of the national finance, but should be organically connected with it.

Dr. Strutz, in his lengthy essay on the German Imperial Law of February, 1911, makes a searching examination of its underlying principles, and criticises in considerable detail the actual provisions of the law. In the result, he has made many points which no student of the subject can afford to ignore. As a pioneer in the local propaganda and in the work of the local authorities, he speaks with great experience, and one is led to infer that he comes out of the fray with some grievances. His work is not intended to appeal to as wide a circle as Dr. Perin's; it has not the latter's lucidity, and much of its argument would seem laboured and hair-splitting to anyone not actually engaged in the administration of the tax. With Diehl, he leads the opposition to the tax as an Imperial impost, and maintains his campaign vigorously. His complaint that all the argumentation, justification, and deliberation concerning the details of the law were consequent upon the continuous wavering between the benefit or equivalence principle, and that of sacrifice or faculty, is probably just; but in the practical issue of the matter the question is pursued with unnecessary insistence. The same difficulty was, of course, present during the English debates, but, in the result, we adhered more closely to the objective principle, faculty operating in a

negative fashion to check its too extended application (*e.g.*, in the non-retrospective principle, and the provisions for "substituted" site values), except in the isolated, *positive* exemptions for small owner-occupiers. Dr. Strutz maintains that the benefit principle cannot possibly be carried out in a State with justice, and the principles applicable to local taxation cannot for the same reason be upheld for the larger area, and he claims to know beyond challenge that this principle was supreme in the earliest Prussian projects, for ". . . dessen erster Entwurf von mir stammt und dessen Ausführung und parlamentarische Verteidigung von 1894 bis 1899, soweit das Finanzministerium in Frage kam . . . in meiner Hand lag." We have become familiar with the German argument for the retrospective tax, that imperial unity consolidated the forces making for increases in ground values: an interesting application of this claims that, as the veterans helped to create the Empire, the duty should provide for their pensions. He considers that the legislator should have chosen one principle and pursued it consistently. Despite his elaborate argument, he has not convinced us that the Imperial duty is *against* the interests of the local bodies.

These contributions to the fast-growing mass of German and Austrian literature on the subject fill places of importance and do their work well. But in terminology every writer appears to be a law unto himself, with deplorable results in the sum total, and these two add to the wholly unnecessary confusion and complexity.

J. C. STAMP

Öfversikt af den Modärna Statliga Inkomst- och Förmögenhetsbeskattningen i Europa. By KARL WILLGREN. (Helsingfors, 1911. Pp. vii+724.)

At the instance of a Committee appointed by the Senate of Finland, of whose reports the present volume forms the first section of the second part, Herr Willgren has prepared a treatise on income and property taxes in Europe. In view of an earlier official document of 1908 treating part of the material, it has not been necessary to his purpose to cover the entire ground. He has, however, given a tolerably comprehensive critical analysis of the nature and methods of this class of taxation in those countries of Europe which have included it among their sources of public revenue.

France, Belgium, Portugal, Russia, Greece, and the Balkan States do not yet possess such taxes, though France and Russia

have under consideration proposals for their establishment ; while Portugal, after setting up an income tax in 1880, abandoned it in the following year. Classifying the existing (and the proposed French) systems in two groups, the examination of their principles and administrative methods deals first with those which, as in the United Kingdom, proceed by the taxation of the income derived from each of several specified sources, or groups of sources, and afterwards with those which deal with the income of each taxable person as a whole. The difficulties of the combination of these two features in our own system are made the subject of comment, especially in reference to the latest developments of differential treatment of incomes deriving from personal effort and from invested capital, and of incomes of different aggregate magnitudes. It may be noted that, in dealing with the manner in which the tax under Schedule A is collected, the English practice is treated as if applying throughout the United Kingdom.

The countries whose systems are examined in the first group are the United Kingdom, Italy, and Spain, the proposals under discussion in France being also discussed in this group. In the second group the systems of the various States of the German Empire, of the Swiss Cantons, of Austria and Hungary, of the Scandinavian countries, and of the Netherlands are examined, the information given including much interesting detail as to scales of progression where these are used, the machinery for assessment, collection and control, the classes of incomes subject to taxation, the nature of any differential treatment granted, and other pertinent matters. In view of the mass of details involved it is not possible to attempt to summarise the results presented, and it must suffice to say that the volume is very informing, and one is justified in regretting that it is not available in one of the more generally familiar languages, so that a larger number of students of public finance might utilise its contents.

But little space is given to discussion of the effects on national finance of the inclusion of income taxes among the sources of revenue, and of the variations in methods followed in different cases ; and the fact that the volume is mainly a presentation of information, arranged so as to bring out the salient features, is a point which will commend it to those who seek facts rather than opinions.

The last hundred pages or thereabout are devoted to an examination of property taxes as distinct from taxes whose amount is measured by the incomes of the taxed persons, and the procedure in this part of the volume is similar to that in the

earlier sections. A useful bibliography is given, extending to nine pages.

Unquestionably Herr Willgren has provided information which should prove of great value to the Committee in its task of planning a reform in the methods of taxation in Finland, as it would indeed in any country.

A. W. FLUX

Saggi economici e finanziari sull' Inghilterra. By RICCARDO DALLA VOLTA. (Milan : Remo Sandron. 1912. Pp. 434.)

THIS is a series of articles on recent phases in English politics, reprinted from various Italian reviews of the last fifteen years. There are several papers on the prospects of free trade, which the author hopes that, both for our own sake and that of our neighbours, we shall not be tempted to abandon; on our financial problems, and on our methods of emigration. He admires the Government's attitude to the last, and threads his way with much success through the labyrinth of our voluntary emigration societies. He has three articles on the labour movement and Socialism in England, and (in 1897) specially praised the practical aims and freedom from political theorising of our Trade Unions. He describes the working of the Land Acts in Ireland, whose problems he thinks only in part comparable to those of southern Italy. The aim of the series is to explain to Italian readers recent changes in English political conditions, rather than to criticise or to forecast. It can hardly, therefore, be of striking interest in this country. But the articles are accurate and judicious, and give a very friendly review of English affairs.

C. V. BUTLER

Le forme del progresso economico in Capitanata. By ANGELO FRACCACRETA. (Naples : Luigi Pierra. 1912. Pp. 173.)

SIGNOR FRACCACRETA has written an interesting study of economic change in a district apparently remote from industrial problems. The Capitanata has been, during the last half-century, in process of transformation from open pastureland to cornfields, and from cornfields to the more or less intensive cultivation of vineyards. After much tribulation, its prospects seem hopeful; the tide of emigration has turned; production has increased, and the labouring classes get more of the product. Peasant proprietors are springing up, and the country needs, according to the author, to make much use of co-operation for such purposes as the purchase of agricultural machinery and the spread of agricultural banks, of

which a number already exist. The sphere of the latter must, however, be limited, as a time of drought may bring all the cultivators of a district to the verge of ruin at the same time. More roads and railways are urgently wanted, with better irrigation in the hottest districts, and organised efforts elsewhere to suppress malaria. The chapter on labour conditions illustrates the difficulty of applying the economic standards of Western Europe to a Mediterranean people with a climate like that of Northern Africa, which, on a yearly average, prevents field work upon at least one day out of three. Many agricultural strikes in the last ten years have raised the pittance of the day labourers, who are said to be now fairly contented with their lot; but they are still liable, in dry weather, to have for weeks at a time no regular work or means of subsistence.

C. V. BUTLER

Les Actions de Travail dans les Sociétés Anonymes à participation ouvrière. By ETIENNE ANTONELLI. With a preface by M. Aristide Briand. (Paris: Felix Alcan. 1912. Pp. 192.)

It is difficult for an English reviewer to do justice to this book. The author propounds a law for the encouragement of what we should call industrial copartnership, and defends it with considerable asperity against certain rival schemes. The problem is discussed under three aspects, legal, social, and economical. The legal discussion is technical, the remainder general. When we come to the general discussion, we naturally look with interest to the list of "expériences faites," in order to see what kind of experiments this law is intended to encourage. The experiences are of two sorts, projects and accomplishments. Unfortunately, the French experiences, to which this projected law approximates, are all of them projects. A railway company, a gas company, a mining company, and a company of river motor-boats are quoted as having outlined parts of the system which it is now proposed to generalise by law. But none of these suggestions are more than three years old, and none of them have so far matured. When we come to accomplishments, we are given a selection of certain successful schemes in England, which seem to the author to be working in his direction. These schemes are taken from the list published by our Labour Copartnership Association under the title of "the transformation of capitalism," in particular those now in operation in the South Metropolitan and other English gas companies, in Lever Bros., Ltd., Foster,

Sons & Co., Ltd., of Padiham, and Gilbert Bros., of Nantwich. But our English successes are not due to special legislation, and an examination of M. Antonelli's scheme will show how widely different are his proposals from our accomplishments.

The projected law is briefly this. Any "*société anonyme*" may register as one "*à participation ouvrière*." In such companies at least one quarter of the shares shall be "workers' shares" held by a special workmen's society in the name of the workers as a whole, and at least one quarter of the management (*i.e.*, of the general board of directors) shall be elected by this special workmen's society, which has the power of appointing trade union officials not servants of the company. All such companies will be excused certain expenses of registration, and will be entitled in tendering for Government contracts to the privileges already enjoyed by workmen's productive societies.

Among the many merits which the author finds in his scheme two in particular interest us. First of all, the workers get their shares "of right." They are not to be reduced to the bourgeois device (this point is developed on p. 65) of purchasing them by savings out of their wages or bonus. Secondly, the workmen's society, which collectively owns these shares, can do what it pleases with the dividends, distribute them among the individual workers in proportion to their wages, pay them to sick or insurance funds or even to the funds of interested trade unions. We naturally ask, in fact the author asks it for us, "What is to be the basis on which the proportion between these gratuitous workers' shares and the ordinary paid up shares of the company will be established? What is to be the position of a worker on retirement?" Our author replies: "All these questions will be decided by the workers themselves in the Act whereby their workers' society is constituted; they will differ according to the case. We have not to provide for it" (p. 31). Seeing that the first question is the most critical of all, and seeing that it could not possibly be decided by the workers alone without reference to those bourgeois persons who supply all the money, it seems a pity that our author does not give us a lead himself. To an unimaginative Englishman it seems possible that M. Antonelli's companies with their exemption from charges and their privileges in Government contracts would (if they ever came into being) resemble those herring boats of which Adam Smith said that they were fitted out to catch not the fish, but the bounty.

C. R. FAY

The Closed Shop in American Trade Unions. By FRANK T. STOCKTON, Ph.D. (Johns Hopkins University Studies in Historical and Political Science, Series XXIX., No. 3, 1911. 187 pp.)

THE relation between union and non-union labour is likely to remain a vexed question for so long as our present social organisation exists. Dr. Stockton's book forms a useful contribution to the literature of the subject, not so much as a critical study of the abstract ethics involved, as an impartial statement of the actual facts of the situation in one particular country, from which it may be possible to glean some idea of the relative advantages and disadvantages of the "closed shop." The greater part of the book is devoted to facts—facts concerning the history of the movement, facts concerning the various forms of "closed shop" and the various means adopted to "close" workplaces and to enforce the rule once established, facts concerning the success or failure of the institution in a large variety of trades, and so on, collected from trade union publications and by personal investigations.

But a study of this kind would not be adequate without some deductions of principle. To these the author devotes his two concluding chapters on the closed shop as a trade union device and on its social aspects. In the first of these, he points out that what he calls the "sentimental argument" (namely, the objection to working with men who do nothing to help in the fight, but merely reap the benefits of trade union activity) is not by any means the only one on which the *raison d'être* of the closed shop is established from the trade union point of view. The system is a device to gain certain ends (*e.g.*, the enforcement of the trade union rules, etc.), and not an end in itself, and, far from being only a passing phrase, it is, Dr. Stockton believes, of rising importance and a method likely to be more and more widely adopted in future. As regards the economic effects from the employer's point of view, clearly these vary according to the exact nature of the rule to be enforced in any particular shop, the crux of the question being whether or not the "right to hire and discharge" is unduly restricted. If it is, and especially if the union in which the employer must find his workmen is "closed" (*i.e.*, not open to every workman in the trade), Dr. Stockton would unhesitatingly condemn the system, although individual employers may reap certain advantages from the use of the union label. As regards the hardship on non-union men, a distinction must be drawn again according as the union

itself is or is not "closed." But closed unions are now rarely found. The question is then concerned with whether or not any loss of individual liberty is compensated for by the benefits gained to the workmen at large by organisation. In summing up the advantages to trade unionism of the system, Dr. Stockton seems to feel that it is likely to be beneficial,—as leading the way to the highest and most efficient form of collective bargaining,—if excesses are avoided. And he concludes by mentioning a suggestion of State regulation of the "constitution, policy and management" of trade unions, only to put it aside as not likely to be a question of practical politics—at least until the closed shop rule has been much more widely and successfully enforced than is the case at present.

SOPHY SANGER

Die freien Gewerkschaften in Gesetzgebung und Politik. By DR. SOPHIE KLÄRMANN. (Leipzig: Duncker u. Humblot. 1912. Pp. vii + 115.)

OF the three principal groups of trade unions in Germany, the "Free," the Hirsch-Duncker or Radical, and the Christian (*i.e.*, Roman Catholic) Unions, the first is by far the most important, both from the number of its members and its influence. From the very first this section of German Trade Unionism has been in close touch with the Social Democratic Party, and Fräulein Dr. Klärmann shows what the relation between the two has been, and also the attitude of the legislature to the "Free" Unions.

Her little book is the 162nd volume in Schmoller and Sering's well-known series, which the enterprise of Duncker and Humblot makes accessible to students. Some of the volumes are of very great value, but all, of course, cannot lay claim to first-rate importance, though the series as a whole is unique. As for the volume before us, we should not be surprised to learn that it was a doctoral dissertation. Anyhow, it shows conclusively that the author knows how to prosecute original research. As such it is satisfactory enough; as a contribution to learning, however, we are afraid that it will occupy only a very narrow niche.

It is doubtful whether it was worth while to refer to the Reports of the Reichstag debates in order to set forth what exactly a particular member of the House said on such and such a date. Indeed, the first part of the booklet is overloaded with too many insignificant details. In the second section, which treats of the influence of the Social Democrats on the "Free" Unions, there is

a good deal that is valuable. Especially interesting is the chapter on Labour celebrations on May Day--how, ever since 1889, when the celebration was first proposed, the Trade Unions in Germany have not been very enthusiastic about it. The author is mistaken if she imagines (p. 49 note) that Labour Day is not celebrated on May 1st in England by at least some of the Trade Unions. It is also incorrect to speak of Mr. John Burns as Minister of Labour.

The book is concerned solely with German Trade Union conditions, and concludes with the assertion that Trade Unionism in Germany occupies a position midway between the policy of compromise which characterises the English movement, on the one hand, and that of anti-parliamentary Syndicalism on the other.

M. ERSTEIN

The Trade of the East India Company from 1709 to 1813. By E. P. ROBINSON. (Cambridge University Press. 1912. Pp. vii+186. 3s. 6d. net.)

THIS is a fresh and suggestive essay, which treats of the trade of the Company from the data preserved in the pamphlets which appeared in considerable numbers from time to time, in addition to which occasional reference is made to the records at the India Office. It would have been more satisfactory to have relied mainly on the latter and less on the former. The great mass of tracts relating to India is undoubtedly valuable, but one needs to be able to discount the special bias of the writer--after which the outstanding impression is often the great skill with which that bias is concealed.

Probably no writer, who is conscious of the importance of the later history of the Company, could succeed in isolating commercial questions from political ones. The final result that a chartered company succeeded in founding an Empire--it may have been almost against its will--still remains; and Mr. Robinson's conclusion as to the advantages of private enterprise (pp. 173, 174) is well judged. He also draws attention to the patriotism and straightforward methods of the Company. This view, however, leaves the trading monopoly as a very difficult problem, and a judicious method has been adopted in studying it at different stages, since the arguments, for and against, varied from generation to generation. Without a monopoly there would have been no East India Company in the seventeenth and eighteenth centuries; and without a Company British relations with India would have been very different.

It is unfortunate that the account of events before 1709 contains a number of errors. The East India Company was not "the first to employ the joint-stock principle for the management of trading ventures" in England, nor was it a Regulated Company "during the first few years of its existence," nor could entrance into a Regulated Company be "always obtained by paying a fee" (p. 4)—there was often a "test" to which the applicant must conform. Again, the capital in 1657 *was* intended to be divisible amongst the shareholders after seven years, but circumstances prevented it. There are also several errors in the interesting summary of the foundation of the New Company and the Union in 1709 (*e.g.*, "the preponderating influence" of the Old Company and the date of the call of 25 per cent., pp. 27, 28). The loan required by 6 Anne c. 17 was not the first instance of the principle of "consolidated funds" (p. 36). The idea that the trade had to be conducted on an intricate credit basis is correct, but the basis of the operation is certainly stated wrongly on p. 36. An acquaintance with the work of Dr. S. Van Brakel would perhaps have modified some of the views expressed concerning the Dutch East India Company (*e.g.*, p. 170).

W. R. SCOTT.

NOTES AND MEMORANDA

THE ECONOMIC FUTURE OF GOLD.

THE importance of the Witwatersrand as a gold producer is shown by these figures :—

Year.	1906.	1911.
	£	£
Transvaal	23,600,000	35,000,000
Rest of world	59,700,000	62,200,000
Total	83,300,000	97,200,000
Transvaal (per cent.)	28·3	36·0

The production of the rest of the world has only grown slightly, and is now tending to fall off ; that of the Transvaal—practically all from the Witwatersrand deposits—has increased rapidly, and is still growing.

These deposits are of an unusual nature, and their geological character has a bearing on the economic future of gold.

The sources of gold may be grouped in three classes : (i.) alluvial ; (ii.) quartz ; (iii.) Witwatersrand banket. The first can be worked by anyone with a trifling amount of capital, and consequently, when discovered, get worked out very rapidly. They are no longer found except in remote parts of the earth, such as the Alaskan snows or the sandy deserts of West Australia ; they, probably, will be of little importance in the future.

Ordinary quartz deposits, which at present yield most of the output, require a considerable capital ; but they are very erratic. Accordingly they often yield fortunes to discoverers, but much more often money is thrown away on them. The enterprise is so much of a gamble that the ordinary laws of economics do not apply

to it. Thus, Soetbeer expresses the opinion that more has been spent on prospecting for gold than the product is worth; and de Launay says: "[the gold output] is far higher than it should be in view of the rare occurrence of gold in the earth's crust, if man did not throw himself upon gold ores with more passionate and exaggerated enthusiasm than, for instance, upon iron ores." In other words, quartz mining is not a strictly economic process; it is not one in which the value of the product is regulated by the relation between cost of production and intensity of demand. Accordingly change in value can not be expected to react in the usual way on the supply.

Witwatersrand banket deposits, on the other hand, are of a regularity that is hardly surpassed by any of the base metals or other minerals. They can be treated as a manufacturing industry is treated. The capital required is very large—more than a million for a mine worked on the modern scale; and it takes four or five years to bring the mine to the producing stage. But it is possible to make a fairly close calculation of working costs, and yield, and the element of risk is not greater than in other industries. Under these circumstances a rise or fall in the value of gold influences the directors of the mining industry in the way commonly explained in economic treatises: the Witwatersrand deposits act as a reservoir, steadying the value of gold, to a far greater extent than equally large quartz deposits. Thus gold is entering into the normal categories of economics;—it has perhaps been overlooked how little this has been the case in the past.

The regularity of the Witwatersrand ores is such that attempts have been made to measure the "elasticity" of supply. The author has made some inquiries on this head, and is much indebted to mining authorities on the Rand for their courtesy in helping him. The data are not regarded by them as of sufficient value to publish. This, no doubt, is the case from the mines shareholders' point of view, *i.e.*, it is not possible to make a valid forecast of the profits to be made by a mine in this way. For the more general question considered in this paper perhaps some sort of rough estimate may be made. Thus, at present, four pennyweights (or 17s.) per ton may be taken to represent the cost of working in large, well-equipped mines; and probably most of the engineers would agree that if the number of pennyweights could be reduced to three, the amount of available ore—not only in the central Rand, but in outlying districts where mining is not yet profitable—would be increased by far more than 25 per cent.; rather by 50 to 100 per cent. If this is so, the coefficient of

elasticity of supply is two, three, or four. The steadying effect on prices increases with increase of this coefficient. These facts may then be taken to support the view expressed by the author (*ECONOMIC JOURNAL*, Vol. 22, p. 16) that prices are more likely to approximate to a certain average than to move indefinitely away from it.

R. A. LEHFELDT

Johannesburg.

April, 1912.

THE INCIDENCE OF SOME LAND TAXES AND THE DISPERSION OF DIFFERENTIAL ADVANTAGES.

THE general purpose of this paper is to indicate that the fundamental characteristics of the incidence of certain taxes connected with land are determined by the relative supplies of land endowed with different degrees of the differential advantages for which rents are paid, or, as I shall express it, by the dispersion of relevant differential advantages.

A tax proportional to acreage on all land in use may be selected for illustration. One view commonly held to-day about the incidence of this impost would seem to be that of J. S. Mill, which he states as follows :—

“A tax proportioned to the rent would fall wholly on the rent, and would not at all raise the price of corn, which is regulated by the portion of the produce that pays no rent. A fixed tax of so much per cultivated acre, without distinction of value, would have effects directly the reverse. Taking no more from the best qualities of land than from the worst, it would leave the differences the same as before, and consequently the same corn rents, and the landlords would profit to the full extent of the rise of price. To put the thing in another manner, the price must rise sufficiently to enable the worst land to pay the tax; thus enabling all lands which produce more than the worst to pay not only the tax, but also an increased rent to the landlords.”¹

Mill is positing that the demand for the produce is quite inelastic; and we shall discuss the question exclusively on the same hypothesis. But, before proceeding to our main thesis, an obvious correction must be made in Mill's way of putting things. In Mill's reasoning it is not recognised that the inevitable rise in

¹ *Principles*, Bk. v., Ch. iv., § 3, last paragraph. Ricardo appears to have originated this doctrine (see *Principles*, Ch. xii.). Of modern authorities who have subscribed to it, I may cite Seligman, *Shifting and Incidence of Taxation*, p. 259, last ed.

the price of the produce must be accompanied by a more intensive use all round of some land, and consequently by the desertion of other land. When this is allowed for, while at the same time it is supposed that a portion of the worst land still remains in use, it becomes apparent that corn rent would rise so that landlords would profit more than in the degree in which price rose.

Now it is evident that a particular dispersion of differential advantages is necessarily implied by Mill's results as thus amended. It is implied that there is so much marginal land that the tax could not possibly cause the whole of it to be totally neglected. But this implication, though it may be approximately realised, is never exactly realised. It is certain that an appreciable contraction of the land in use would result in some ascent of marginal fertility—to think for the moment of differential advantages as consisting wholly in fertility, as Mill does in his example.

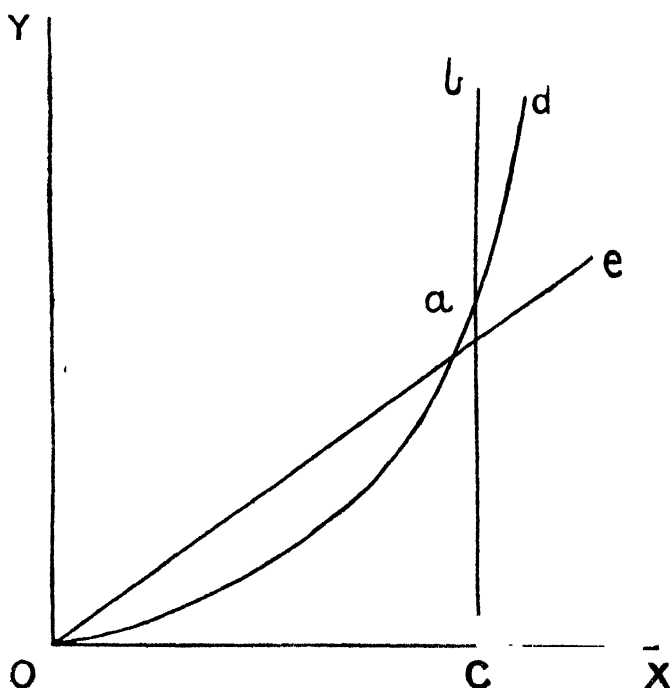
Consider the following figure, supposing that some objective measurement of the totality of the differential advantages associated with different plots of land is attainable.¹ Degrees of differential advantage in the descending order are measured along OX , the maximum being at O , and acres are measured along OY . Mill's argument assumes that when any quantity of land Cb is worked, its marginal quality being OC , the amount of the land in use, which is of marginal quality, must be considerable, say an amount ab . The tax must not be heavy enough to induce the rejection of as much as ab of land.

I submit that this supposition is too sweeping, even if it is broadly interpreted. Assuming that Od is the curve expressing the relation between the marginal quality of land in use and the amount of land in use, the relevant part of the curve Od is not bound to ascend at a rapidly increasing rate. If it did, Mill's reasoning, as amended, would be approximately sound as regards most actual cases. But strictly it holds only at one extremity, or limit, of a range of possible cases lying between it and another limit. Into the characteristics of the other limit we have next to inquire.

At the practical limit implied by Mill's views it is taken for

¹ I proceed in this hypothetical manner so as to follow closely the authorities whom I have referred to and for the sake of simplicity, but my readers will no doubt discover for themselves that a more scientific construction is possible. "Fertility," of course, depends *ceteris paribus* upon the intensity of cultivation. Some of the worst land might become the best when cultivation intensified. This consideration, however, is not sufficiently serious, in my opinion, to invalidate the discussion above.

granted, as has been indicated, that slightly inferior land is likely to be far more abundant than the land just above it in quality. Now we may be quite sure, on the ground of experience, that the diametrically opposite relation, which is such that the superior land is much the more abundant, is so exceedingly unlikely in any circumstances, taken as a whole, that it can be disregarded. But it is not inconceivable practically, though it may be very unlikely, that up to a point the less valuable land should be found in little, if any, more profusion than the better land. Actual conditions in a sparsely populated country, where subsistence farming was the rule, so that situation was of little moment,



might be of this nature. Conceding that a curve in the figure ascending at a decreasing rate (*i.e.*, a curve concave to Ox) is impossible, we are almost bound to admit, as possibly representative in substance of facts in some places and periods, a curve ascending at a constant rate, that is an ascending straight line like Oe . Here, then, the opposite limit may be fixed.

The details of an investigation into the distribution of the burden of the tax at this limit need not be set forth in this note. Suffice it to say that an examination of the case shows (a) that landlords as a class are quite likely to suffer instead of benefiting, and (b) that the proceeds of the tax may exceed the

loss of consumers (as measured in money) when the rate of the tax is not very high. For the loss represented by the proceeds of the tax and the rent which used to be paid for the land thrown out of cultivation, landlords would probably not be recouped by the rise in the gross rental of the acres still worked, consequent upon the enhanced price of the produce, were it a fact that the elasticity of supply on these latter lands was high while the new marginal land had substantial differential advantages over the old marginal land. This being admitted, the truth of proportion (b) becomes evident.

So, as regards the effect of the tax on landlords, at the one limit we have rent increased; but as we pass away from this limit *ceteris paribus* the increase becomes less and less, until it probably gives place to a curtailment of rent, which is steadily magnified as we approach the other limit. As I have already said, under modern conditions the actual consequences of a tax proportional to acreage are likely to be akin to Mill's forecasts, particularly in view of the fact that almost certainly the supplies of land with situational conveniences, measured by proximity to a centre, will be increasingly limited the greater the conveniences. It needs no demonstration to show that the above argument holds in general of building land also when the intensity of its use is affected by the tax.

I now reach my broad conclusions, which I fear must figure as disproportionately as bread in Falstaff's famous meal. The first generalisation is that any tax which relatively discourages the *extensive* use of land tends most to raise rent when differential advantages are dispersed most unevenly (*i.e.*, according to *Od* in the figure), and that when they are dispersed evenly (*i.e.*, according to *Oc* in the figure) rent may be reduced. The second generalisation, which is the complement of the first, is only suggested by the foregoing treatment, but investigation shows that it holds. It is that any tax which relatively discourages the *intensive* use of land tends most to *lower* rent when differential advantages are thus unevenly dispersed, and that when they are dispersed evenly rent may be increased. To illustrate this second generalisation, it may be pointed out that in a long thin town (on a narrow peninsular, say), with its centre, so to speak, at one end, rates which checked high building might raise the totality of ground rents. The effect of these taxes on consumers under the different conditions imagined can easily be inferred when the effect on rent is known.

S. J. CHAPMAN

THE FAMILY BUDGET OF AN INDIAN RAIYAT.

THE keynote of Indian village life is simplicity. The village is simpler, far simpler, in its economic than in its social or religious aspects. Social and religious customs vary much from village to village and from caste to caste within the same village. The lines of economic cleavage largely follow the classification of individuals according to their means. In its economic aspects, therefore, there is a sufficient sameness in Indian village life to justify us in talking of a typical village. A single village in Bengal, or one in Bombay, or Madras, or Upper India, or the Central Provinces, will serve as a type for the whole of India for our present purpose. The elementary needs are the same, though the enviring circumstances may differ, as they do differ, considerably.

But may we talk of a typical villager? No, we cannot; yet we may talk of a *raiayat*, who is neither very rich nor very poor; such a *raiayat*, for instance, as cultivates five to twenty acres of land. By this we mean a man who cultivates the land by himself with the help of his family, employing a few casual labourers at busy times to help him,—though there is one task which the ordinary *raiayat*, however lazy he may be, will not entrust to anyone else, and that is the sowing of the seed. For the use of this bit of land the *raiayat* pays rent to someone—it may be a middleman, but we will call him a landlord for our present purposes. This is not the place to go into questions of land tenure, of which the kinds are legion.

The cultivator, then, pays rent to the landlord; the amount of rent depending on various considerations, amongst which must be reckoned the quality of the soil, though this is by no means a determining factor. We cannot apply Ricardian theories to Indian rents. In fact, largely owing to the “intrusions” of officials of the Settlement Department, rents are in practice kept far below the “economic” figure which would result from a system of competition. Still, we find rents ranging from four annas to Rs. 75¹ an acre. It is as impossible to talk of a typical or average rent as it is to talk of a typical or average cultivator. We have, however, a village rate for every village, which is a rough kind of average, taking into account the quantities of land held at each rate of rent.

¹ Rs. 75 is £5 sterling at the rate of exchange, 1s. 4d. the rupee. One anna is a penny at the same rate.

The *raiya*t's holding grows one, two, or possibly three crops in the year, according to the soil, climate, and local agricultural traditions. He sells them straight from the threshing floor to the landlord or to the local grain merchant, who is not infrequently the village money-lender. If the village is near a town, he may sell direct to an agent of the town grain merchant, who sells the grain in turn to bigger merchants. The main portion of a good crop thus finds its way to the big towns, or to places where temporary scarcity exists. A portion remains under normal conditions for local consumption and seed purposes either in the village itself or in the nearest market-place. Where the local means of communication are good, the portion retained in the villages is generally inconsiderable. Anyone who has had personal experience of the working of a District Board or Road Cess Committee must have been at some time or other struck with the fact that the substitution of a bridge for a ferry crossing a river results in a large increase in the traffic. It is, in fact, not at all an uncommon thing to find the cart traffic doubled by a bridge. The reason is generally to be found in the local movements of grain. Grain which was formerly retained for local consumption in the village anent the next harvest now crosses the bridge to the nearest market, where it is stored in godowns or granaries to be returned across the bridge in due course to meet the gradual village requirements. In this way the cultivator gets a better price for his grain by selling in a larger market. A certain amount of grain is, however, always retained in the village itself for local consumption, and is to be found stored away inside the houses contained in a mud cylinder built up from the earthen floor.

Among the most prominent features of a strictly rural economy are, as might be expected, the cattle. The villager obtains his supply of milk chiefly from the buffalo and the goat, cow milk being regarded as rather a luxury. The cow is, strictly speaking, not quite an economic product amongst Hindus, because to a Hindu it is almost an act of impiety to sell a cow for profit. But he sometimes gets round this difficulty by selling the cow along with a bull calf—a justifiable operation of the nature of a legal fiction. A fairly good cow is generally obtainable for Rs. 15 (one pound sterling). A pair of ordinary plough bullocks costs from Rs. 50 to Rs. 100, but in case of Gujerati and other good strains the price often runs much higher. Bullocks are amongst the villager's most prized possessions. So solicitous is he of their welfare that he burns cow-dung cakes all night to

the windward of them to prevent the ubiquitous mosquito from biting them.

We will now try to arrange the budget estimate of an ordinary cultivator. The facts and figures have been ascertained by the most careful inquiries made in circumstances which leave no room for doubt or suspicion as to their accuracy. The case selected is typical of a very large class. The *raiya* happens to be a Mahomedan, but except in respect of the keeping of fowls, he might be a Hindu. His name is Nasiruddin. He has a wife, two sons, and three daughters, all living with him. He has also a brother living in the same house, but separate in mess. The latter has not been considered as a member of the family. The holding consists of eighteen acres, half of which is in usufructuary mortgage to a creditor. We have only to do, then, with the nine acres held in actual possession of Nasiruddin. On the debit side of his annual budget we have the following items :—

	Rupees.
Diet... ..	80/-
Labour employed in ploughing, transplanting, weeding, and reaping	12/-
Seedlings	8/-
Ceremonies at death and marriage (averaged)	10/-
Clothing	15/-
Rent	28/-
Toddy (<i>tari</i>)	4/-
Repairs to house	7/-
Cattle and agricultural implements ..	10/-
<i>Chaukidari</i> tax (village watch)	-/12/-
Tobacco and lime	2/4/-
Total Rs. ...	177/-

The equivalent of this in sterling at the rate of 1s. 4d. the rupee is £11 16s. 8d. On the credit side we have the following items :—

	Rupees.
Bhadoi crops	30/-
Aghani crop (rice)	120/-
Rabbi (winter) crops	20/-
Income from sale of fowls	10/-
„ „ dealing in cattle	10/-
Total Rs. ...	190/-

or, in sterling, £12 13s. 4d.

Nasiruddin has thus Rs. 13, or rather less than £1 sterling, left at the end of the year to pay his debts, or to buy bangles for his wife. Here is a list of the articles actually found in his house classified as necessities and luxuries :—

Necessities.

Beds, two.	Cups, three.
Earthen vessels for holding rice, three.	Pair of scales.
Earthen cooking pots, eight.	Sieve.
Earthen pot for oil.	Baskets, nine.
Ladder.	Pillows, two.
Stone for grinding spices.	Water lifter (kareon).
Wooden instrument for threshing paddy.	Water pitchers, three.
Earthen plates, eight.	Mills for grinding corn, two.
Rope for hanging clothes.	Clothing, about a dozen articles, costing, all told, about Rs. 20.
Plough.	Quilt.
Bullock (one, the other being lent by his brother).	Large iron-bound wooden chest.

Luxuries.

Umbrella.	Hookah.
Enamelled plate.	Fowls, eighteen in number.
Bottle for kerosine oil.	Goats, two.
Brass vessel (<i>lota</i>).	Buffalo, one.
Carpet.	Ornaments (not shown, said to be worth Rs. 15 or Rs. 20, but probably worth a little more).
Lantern.	
Tobacco and lime (for hookah).	

It will be seen at a glance how extremely simple is the furniture of the *raiyat's* house. There is no need to preach *swadeshi* principles to the ordinary *raiyat*, for he is already in the nature of things and of necessity as *swadeshi* as he can be. If we except the umbrella (which came from Austria), the enamelled plate (from Germany), the metal of the brass *lota* and the ornaments, and three or four of the simple articles of clothing (from Manchester), the whole of the *raiyat's* little stock was produced in India; some of it, in fact, *in situ*.

A casual perusal of these lists might convey the impression that, judged by Western standards of wealth, the Indian *raiyat* is miserably poor. In reality, however, no standard of comparison is possible. The wind is tempered to the shorn lamb. The clothing which the English climate makes a necessity to the ordinary workman, would positively incommode the movements of the Indian coolie. Buckle has accustomed us to the idea of the appropriate relations of a frugal dietary to a tropical clime. There is no limit to income below which respectable existence becomes impossible, for in the East even the beggar is respectable.

We will now consider briefly the nature of the local distributing agency. The cultivator buys his commodities in the

village shop. Here is a list of the commodities which were actually found in it :—

Cloth.	Spices.
Kerosine oil (Burma).	Various native medicines.
Treacle.	Tobacco.
Potatoes (sweet).	Pulses.
Salt.	Matches.
Dyes.	

The matches hail from Japan, the dyes (aniline) from Germany, the cloth from England. This shop obtains its supplies from the nearest *hât*, or public market, at which the most extravagant miscellany of goods may be found displayed. There are two market days a week, and people come from all the villages within a radius of ten miles. The *hât* is mapped out into lanes, the separate shop spaces on either side being demarcated by bamboos let into the ground. In one corner is the cattle dealer; hard by the sweetmeat seller sits in a halo of hornets, his sticky wares exuding moisture in the broiling sun; next door to him the butcher with amorphous and problematic legs of goat hanging over the street. You cannot see his wares for they are an inch deep in hornets. Giving the butcher a wide berth, you are brought up against the seller of vegetables. Then comes the fish shop: old women are selling small fish in small baskets; then you pass on in succession to the vendors of spices, oils (mustard and castor), salt (both European and of local manufacture), tobacco, rice and pulses, clothing of all kinds (for male and female), matting, *gur* (molasses), lime (locally manufactured from worms), baskets, buffaloes' milk, votive clay horses intended for women to offer to the gods; till, attracted by the strains of a gramophone grinding out a Hindustani dance, you find yourself with a pedlar who sells looking-glasses, necklaces, matches, scissors, locks, combs, brushes, lamps (Hinks' lanterns), rings, umbrellas, gilt bangles, thread, and innumerable other things from Manchester, Birmingham, and Sheffield. The tailor sits close by plying a "Singer" machine; next him is the seller of buffalo bells; and then the saddler, who also sells equipments for elephants; next him, at the end of the line, a very old man is explaining to an admiring throng of small boys the mysteries of an antique "European bicycle," and a goldsmith (who also lends money for a consideration) is chipping small pieces with a chisel from a slab of gold which bears the stamp of the Bank of England. When the bazaar is "warm," a vast business is conducted in small details to the accompaniment of a din compared with which

Billingsgate or Covent Garden at their best are as halls of silence. Such is the Indian village *hât*.

The above lists fully bear out the assertion with which we set out—that the keynote of Indian village life is simplicity. The great bulk of the commodities is of indigenous growth or manufacture. The few commodities of European production are mostly cheap. The umbrellas were selling at one rupee apiece. An umbrella of better quality would not sell in such a place.

H. R. PERROTT

OFFICIAL PAPERS

Report by the Committee on Irish Finance. [Cd. 6153.] 1912.
Price 3½d.

Government of Ireland Bill: Outline of Financial Provisions.
[Cd. 6154.] 1912. Price 1d.

Return Showing the Debt Incurred for purely Irish Purposes.
[H. of C. 110.] 1912. Price 1d.

THE problem of Irish finance has taken on a new complexion since the time of the earlier Home Rule Bills, by reason of the fact that Irish expenditure now exceeds Irish revenue. It is no longer a question of how much Ireland should pay towards Imperial expenditure. Interest, especially in Ireland, now centres round how much she is to get. One of the first tasks of the Committee, appointed by the Government previous to the bringing in of the Home Rule Bill, was therefore to inquire into the probable amount of this deficit. On the whole, they justify the figures of the much-abused Treasury White Paper. This return is not free from error; but there is not much reason, in the opinion of the Committee, for thinking that the errors preponderate on one side rather than the other. It is fairly certain that, since the grant of Old Age Pensions, there has been a deficit of about £1,000,000 on an expenditure of between £11,000,000 and £12,000,000 for purely Irish purposes. In 1912-13 it is estimated (in the *Outline of Financial Provisions*) that the expenditure will rise to £12,354,000 and the deficit to about £1,500,000.

There are few other relevant facts. With one or two inconsiderable exceptions (Land Tax, Inhabited House Duty, Railway Passenger Duty, and Patent Medicine Duties), revenue is at present raised in Ireland by the same taxes as in Great Britain. It is also necessary to bear it in mind that, as Ireland is a poorer country than England, a scale, whether of judicial salaries or of

old age pensions, which is reasonable here, may be extravagant there. Apart from these considerations, we have for solution a pure problem in federal finance and political expediency.

The method of solving it, recommended by the Committee of Inquiry, has not been adopted by the Government. The recommendations of the former were excessively simple: the Irish Parliament to have the power of imposing and levying all taxation in Ireland (with reservations, if necessary, in the matter of tariffs), the Imperial Exchequer to bear the cost of all old age pensions already granted at the date of transfer (which, being estimated at about £3,000,000 would give the Irish Exchequer a handsome surplus to start with), and "the obligation of Ireland to contribute to the general expenditure of the realm to be affirmed, but a settlement of the amount of the contribution to be allowed to remain in abeyance." The Government's plan is much more complicated. It leaves unimpaired the Imperial Parliament's right to levy taxation in Ireland, but the Irish Parliament may (subject to the transfers to be explained later) vary in Ireland, as it sees fit, the rate of any Imperial tax (though not by addition to an amount exceeding 10 per cent. in the case of Income Tax, Death Duties, or Customs Duties other than those on beer and spirits), and may levy any new taxes other than Customs Duties. The Imperial Government is to collect all revenue in Ireland as heretofore, and is to hand over to the Irish Exchequer a certain part of this revenue known as the *Transferred Sum*; and (in addition to the collection of taxes) is to control and bear the cost of certain services known as the *Reserved Services*¹—namely the Constabulary, Land Purchase, and the "Social Reform" Services (Old Age Pensions, Health Insurance, Unemployment Insurance, and Labour Exchanges). The principles on which the amount of the Transferred Sum is to be calculated are laid down in the Bill and a Joint Exchequer Board is to be set up to determine the facts. At first this sum is fixed so as to yield a surplus of £500,000 (dropping to £200,000 within six years) over the *present* expenditure on Irish Government *less* the cost of the Reserved Services. If the Irish Parliament levies new taxes or adds to those levied by the Imperial Parliament, the estimated additional yield is added to the Transferred Sum; if it diminishes the rate of an Imperial tax, the estimated loss is deducted from it. Apart from such changes, the amount of the Transferred Sum is to remain rigidly fixed—whether the

¹ Under certain conditions any of these may cease eventually to be Reserved Services.

yield of taxes in Ireland as levied at the present time rises or falls—until an equilibrium has been reached between the total revenue derived from Ireland and the total expenditure on Irish purposes. When this equilibrium is reached and Ireland is self-supporting again, the whole question of the relations between Irish and Imperial finance is to be reopened.

Thus the Government scheme only agrees with the proposals of the Committee in shelving the fundamental problem of federal finance—the problem of how a subordinate unit can best be made to contribute to Imperial purposes. Ingenious and interesting though this scheme is, it is a contribution rather to the art of political expediency than to that of federal finance. This was, probably, inevitable. So long as Ireland is not self-supporting, the question of her contribution to Imperial purposes must remain academic; and it is generally inexpedient to legislate for conditions not yet actual. By the time Ireland is self-supporting the whole situation may have changed. The Government scheme, then, is a stop-gap affair, designed to tide over a period of transition, not to solve a fundamental problem of statesmanship. Looked at from this standpoint, it seems fairly workmanlike and, though not without political subtlety (passive resistance to the payment of taxes on the part of Ulster, it may be noticed, will be resistance to the Imperial, not to the Irish Government) unobjectionable in principle. The retention of the power to collect taxes is a very real guarantee of the supremacy of the Central Government.

The economist, however, may look forward a little further than would be wise for the politician. Does the Irish case suggest any reflections to us which bear on the ultimate problem? Speaking broadly, it has been the accepted doctrine amongst existing Federations that customs should be regarded as a peculiarly Imperial source of revenue, and direct taxes on incomes and inheritances as appertaining primarily to the individual States. It was on these lines that the financial schemes of the earlier Home Rule Bills were framed. It is on these lines that those are thinking, who look to some sort of Customs Union as a necessary first step to closer relations between the component parts of the British Empire. But experience points the other way both in Germany and in the United States, where the central governments have suffered embarrassment in their financial arrangements through being practically precluded by State rights from the simpler forms of direct taxation. So also, I think, does reflection upon the general question. Unless the federated

units are very similar to one another in economic status and condition, the details of customs duties, whether levied for protective purposes or for revenue, must plainly depend upon local circumstances. For protection a uniform rate over a wide and varied region must prove excessive in one part if it is to be adequate in another. And for revenue a uniform system of customs must be both inequitable and unproductive. The inequity of indirect taxes as between scattered individuals with different tastes in matters of consumption we may ignore. But when the individuals against whom our system discriminates form a compact community, we can no longer do so safely. Even in the case of Ireland, where the difference of conditions is but moderate, the question whether her consumption of beer or whisky or tea is above or below that of the rest of the United Kingdom may give rise to acute controversy. Nor yet, if tastes were uniform, would it be easy to adjust indirect taxes for Imperial purposes so that the contributions of districts of varying degrees of wealth would be fairly adjusted to capacity. To levy customs imperially and to make Ireland contribute thus to Imperial purposes would be, therefore, most inpolitic. And the more widely such a policy were extended, the more impracticable would it become.

There are two other ways in which a Central Government can derive revenue from its component parts: by money contributions or by direct taxes. If the amount of the money contribution is to vary, this arrangement is unsatisfactory as regards both the internal finance of the parts and the method of determining how it is to vary. If the amount is to be fixed, this arrangement must greatly embarrass the finance of the Central Government, and is incapable of allowing for changes in the capacity of the component parts to bear the taxation. Both these points are illustrated by the case of Ireland. But to an Imperial tax on incomes and inheritances I see no such objection. Such a tax has far less need to adjust itself to varying local conditions than a direct tax has. It is admirably elastic, and its yield is, on the whole, as good an automatic test as one could hope for of the taxable capacity of the separate parts. Moreover, in the case of Great Britain and Ireland, between which capital and its ownership is distributed in a complicated way, there are very strong administrative reasons for a joint control of the direct taxes; and this consideration, though less strong, has nevertheless much weight in the case of other parts of the Empire. It is to be hoped, therefore, that when the time comes for a final settlement, the policy of retaining for the Central Government the whole

control, and the whole or some specified part of the yield, of the taxes on incomes and inheritances will receive serious consideration. It would prove, I believe, a sound foundation for federal finance not only as between Ireland and Great Britain, but in the event of "Home Rule all round" or in the event of federalisation for Imperial purposes of the other parts of the Empire.

J. M. KEYNES

Strikes and Lock-outs: Memoranda prepared from Information in the Possession of the Labour Department of the Board of Trade relating to the Text and Operation of certain Laws in the British Dominions and Foreign Countries affecting Strikes and Lock-outs, with especial reference to Public Utility Services. [Cd. 6081.] 1912. Price 1s. 5d.

THE events of the last twelve months have in a very forcible manner drawn public attention to the question whether it is desirable and practicable in the interests of the community as a whole to limit the right to wage industrial warfare, especially in industries which provide goods or services that are necessary to national life. The present series of memoranda, prepared in response to questions in Parliament, shows what has been done by our Colonies and by foreign countries in this respect; and though, as the covering letter points out, the report is not exhaustive, it brings together a great deal of information, from foreign Government publications and elsewhere, which would otherwise be inaccessible to the general public. In very few countries is the statute book so innocent of restrictions of the right to strike or lock-out as it is in Great Britain, as may be seen by a glance at the long list of countries referred to in the report. But the industries to which the restrictions apply and the nature of the limitations imposed are so varied that it is not possible to make any useful analysis or classification of the different laws. Nor is it possible, except in a very few cases, for the report to supply an adequate answer to the crucial question whether the restrictions are effective in attaining their object even in the countries which have imposed them. Far less does it enable us to decide which of the many plans adopted would be effective in the special conditions obtaining in Great Britain.

The various Australasian experiments are fairly well known in this country, but less has been heard of the Canadian Industrial Disputes Investigation Act of 1907. This Act declares that strikes and lock-outs are illegal in the case of mines, transporta-

tion, communication and public service utilities, "including except as hereinafter provided, railways, whether operated by steam, electricity, or other motive power, steamships, telegraph and telephone lines, gas, electric light, water, and power works," until the dispute has been investigated and reported on by a Board of Conciliation. The report of the Board is not binding, but it was anticipated that the authority of a non-partisan investigation and report would usually be sufficient to bring about a settlement, and in practice it has been found to do so. Since 1907, 106 applications for the appointment of Boards have been received (of which 84 refer either to railways or mines), and in only 10 of these cases was the award rejected and followed by a strike. Even in these instances the ultimate settlement was on the conditions recommended by the Board in seven out of the ten cases.

The recent Danish laws on the subject are somewhat similar to those in Canada. Two Acts passed in 1910 provide, in the one case, for the appointment of a permanent Arbitration Court, with power to inflict fines, &c., whose business it is to make the parties to a dispute respect any agreement concerning arbitration into which they may have entered; and, in the other, for the setting up of a permanent Government Conciliator, with power, on his own initiative, to compel disputants to appear in conference before him, but without any power of enforcing awards. It is too soon to say whether this scheme will be successful or not.

Germany, as one would expect, deals with the problem in a more drastic manner. The right to strike or lock-out is specifically granted, together with permission to form combinations to raise wages, &c., by Sec. 152 of the Imperial Industrial Code of 1869. But "industry" is interpreted to exclude agriculture and all operations carried on by the State or by municipalities, while railways, fisheries, ferries, and the mercantile marine are specifically excluded from this section of the Code. The legal position of persons in many of these excluded industries is doubtful as regards the right of combination, but the conditions of admission to the Civil Service and railway employment preclude the possibility of the formation of unions except such as are approved by the Government.

The numerous experiments dealt with in the report are exceedingly suggestive, but one cannot read it without realising that each nation must solve the problem in its own way, with due regard to its history, its tradition, and the state of public opinion.

W. T. LAYTON

Statistical Abstract of the United States for 1911. Prepared by the Bureau of Statistics. (34th number.) (Washington : Government Printing Office. 1912. Pp. 803.

AMONGST the principal sections are the following :—Natural Resources and Population ; Agriculture, Forestry and Fisheries ; Manufacturing and Mining Industries ; Occupations, Labour, and Wages ; Internal Communication and Transportation ; Shipping ; Foreign Commerce ; Prices ; Consumption Estimates ; Money, Banking, and Insurance ; Wealth and Public Finance.

Select List of References on Employers' Liability and Workmen's Compensation. (Washington : Government Printing Office. 1911. 25 cents.)

Select List of References on Parcels Post. (Washington : Government Printing Office. 1911.)

RECENT additions to the series of bibliographies issued by the library of Congress. The former is very full and contains more than 1,000 entries classified according to countries ; there is also a useful Subject Index. A list relating to employers' liability was issued in 1906, and a list relating to workingmen's insurance was issued in 1908. The present list is mainly concerned, therefore, with the more recent literature of the subject.

Census of England and Wales, 1911. Area, Families or Separate Occupiers, and Population.

Vol. I.—*Administrative Areas: Counties, Urban and Rural Districts, etc.* [Cd. 6258.] 1912. Price 5s. 4d.

Vol. II.—*Registration Areas.* [Cd. 6259.] 1912. Price 3s. 7d.

Fifteenth Abstract of Labour Statistics of the United Kingdom. [Cd. 6228.] 1912. Price 1s. 6d.

THE latest year for which complete figures are given is generally 1910, but preliminary figures for 1911 are inserted where possible. Amongst the new tables appearing in this Abstract for the first time are those relating to Old Age Pensions (in Great Britain nearly two-thirds of the pensioners are women), to Distress Committees, to Wage-rates fixed by Trade Boards, and to the Average Hours of Labour in various industries.

Departmental Committee on Local Taxation. First Report. [Cd. 6304.] 1912. Price 1d.

Appendix to First Report. Vol. I.—Minutes of Evidence. [Cd. 6303—I.] 1912. Price 4s.

Appendix to First Report.—Vol. II.—Memoranda submitted to the Committee. [Cd. 6303—II.] 1912. Price 1s. 4d.

To be reviewed.

Total Output of Agricultural Land and Number of Persons Engaged. Report on Inquiries made by the Board of Agriculture in connection with the Census of Production. [Cd. 6277.] 1912. Price 6d.

THIS return attempts to supply the facts relating to Agriculture corresponding to those relating to Industry which are being supplied by the Census of Production.

Tables showing for each of the years 1900–1911 the estimated value of the Imports and Exports of the United Kingdom at the prices prevailing in 1900. [Cd. 6314.] 1912. Price 3d.

To be reviewed.

Taxes in force in England and Wales, Scotland, and Ireland, separately, for each year since 1823, specifying the principal rates and the yield of each tax. [H. of C. 109.] 1912. Price 1s. 2d.

Statement of Paupers in receipt of Relief on January 1, 1912, in each Union, with Memorandum and Comparative Statistics, 1872 to 1912. [H. of C. 141.] 1912. Price 6d.

Disputes affecting Transport Workers in the Port of London and on the Medway. Report of Inquiry by Sir Edward Clarke, with Minutes of Evidence. [Cd. 6229.] 1912. Price 6d.

Statistical Abstract for London, 1911–12. Published by the London County Council (1516). (London : P. S. King. 1912. Price 1s.)

, OBITUARY.—FRÉDÉRIC PASSY (1822–1912).

THE *Société d'Economie Politique* of Paris has lost within the last twelve months three of its presidents—Levasseur, Molinari, and Frédéric Passy—three economists who embodied the finest traditions of the Liberal school in France. Each of the three lived to a great age—eighty-four, ninety-four, and ninety-one years respectively—and each was working to the last. Of the three names, that of Frédéric Passy was the most familiar to the world at large, but he owed his world-wide reputation not so much to his studies in political economy as to his ardent propaganda in the cause of peace and international arbitration. However, he chose to dedicate to political economy the first and longest period of his life. He was not a writer with original views as Molinari was, nor an historian and statistician like Levasseur; he was an apostle. He devoted himself in the main to lecturing and journalism. Even his books are, as a rule, no more than collections of his public lectures. As an orator he could carry away his audience, speaking “*ore rotundo*,” with an impressive voice. His style sparkled with images, and, in his old age especially, his fine patriarchal head gave an added force to his words. Being an ardent disciple of Bastiat, he devoted his attention above all to enlightening his hearers by displaying to them the “Economic Harmonies.” He would defend Free Trade and the Rights of Property in the teeth of Protectionist and Socialist, and assert his belief in Competition, in the progress of industry, and in “*libres initiatives*” as the final remedies for social disorder. As member of the Chamber of Deputies, he did his best to have the law limiting the rate of interest repealed, and he succeeded, by the law of 1886, in getting rid of such restrictions, at any rate in commercial matters.

The Franco-Prussian War of 1870 was a great shock to him. He turned to politics—war seeming to him more fatal even than social disorder. All that a private citizen could do he did to avert that fatal war, and it is possible that he succeeded in delaying it for a few years. In 1867 the two nations were first embroiled over Luxembourg. At this moment Passy wrote a letter in *Le Temps* which made a deep impression on public opinion. And he founded at the same time the *Ligue Internationale de la Paix*. The League was, of course, lost in the storm of war, but immediately afterwards Passy revived it under the name of the *Société française pour l'Arbitrage entre les Nations*. Since then he never relaxed his efforts in the cause of arbitration. His ardour

redoubled as he advanced in years. He was the *Président d'Honneur* of every International Congress, and in 1901 he received the Nobel Prize. From 1881 to 1888 he was a member of the Chamber of Deputies, and he took advantage of his seat in Parliament to found, in 1888, the *Union Interparlementaire pour l'Arbitrage et la Paix*.

In the course of his long life, Frédéric Passy had many disappointments. As economist, he had witnessed a Free Trade victory in France in the treaty with England in 1860, and yet he has seen since then Protectionism revive with more vigour than ever. As advocate of peace he has watched in the last days of his life the horizon of politics darkening over with clouds—now quarrels between France and Germany, now war between Italy and the Turks. He himself wrote at the beginning of the year, "If I die to-morrow, my death will certainly have been hurried on by the sad events of this year." But in spite of all he never wavered in his hope for the final triumph of that august sisterhood, Liberty Justice, and Peace. He had served them all his life, and they did not fail him at the last.

On the 31st May of this year the *Société d'Economie Politique*, of which he was the President, celebrated the Jubilee of his ninetieth birthday by holding a solemn meeting at the Sorbonne. Several economists from other lands, notably Professor Luijckx van Brecht of Munich and Professor Herkner of Berlin, had come to pay their homage. Frédéric Passy, already fast approaching his end (he died on the 12th of June), was not able to be present, but he sent a message which was listened to with deep emotion as if it were a voice from beyond the tomb. His words were these:—"If I were present, this meeting would have redounded simply to the glory of a man. In my absence, it will be first and foremost a challenge to the world, a proclamation of the duty of everyone to labour always for the material and moral advancement of mankind, an assertion of faith in the efficacy of whole-hearted efforts in their behalf."

CHARLES GIDE

M. Passy's principal works are the following:—

Mélanges Economiques. 1857.

Leçons d'Economie Politique. 2 vol. 1860-1861.

Les machines et leur influence sur le progrès social. 1866.

Le Principe de la Population: Malthus et sa doctrine. 1868.

Histoire du Travail. 1873.

La solidarité du Travail et du Capital. 1875.

Vérités et paradoxes. 1894.

Les causeries du Grand père. 1905.

CURRENT TOPICS.

THE prominence given, alike in politics and in much current writing, to the phenomena of industrial unrest, tends to obscure the facts that, in spite of all, trade is good and that labour, as reflected in the Board of Trade returns, is being employed to an extent that is characteristic only of the most prosperous years. As compared with the average for the last decade, only the returns for the end of March were unfavourable, and these were rendered entirely abnormal by the coal strike. At the end of January, February, June, and July (when the number returned as unemployed was 2·6 per cent. of the total), the lowest percentages returned during the whole of the period 1902-11 were recorded.

IN connection with the disturbed conditions of industrial relationships, the recent dock strike in London calls for special comment as affording the most regrettable and the most conspicuous instance of breakdown. The strike, which ended formally on July 29th, turned on no clear issue, but the proximate cause—the refusal of an ex-foreman lighterman to join the Amalgamated Society of Watermen and Lightermen—was linked up with one more fundamental in character, namely, the desire to unionise the services of the Port through the instrumentality of the National Transport Workers' Federation. Other grievances were gradually formulated, including alleged breaches of existing agreements, these breaches being complicated in some cases by the withdrawal of individual employers concerned from their contracting associations. The reality of the grievances that existed do not in themselves, however, explain the action subsequently taken by the men's leaders. Their attempts to hold up the work of the Port, and to bring about a national stoppage of transport workers—in the one case only partially successful and in the other a complete failure—were the outcome not so much of the circumstances of a local and particular dispute as of the ill-considered adoption of a wider and an irreconcilable policy.

VARIOUS circumstances of this unfortunate dispute—especially the economic waste involved, the misery and suffering caused to non-combatants, and particularly to women and children, and the accentuation of the friction between union and non-union labour—have directed fresh attention to such questions as the validity and enforcement of industrial agreements, and the adequacy of the machinery available for the prevention or settlement of active industrial dispute. Both of these questions have

been under the special investigation of the Industrial Council, and in connection with the latter Sir George Askwith has been requested to proceed to Canada to study the lessons that may be learnt from the working of the Industrial Disputes Investigation Act of that Dominion. This step is all to the good, for it is desirable that the community should have at its disposal the best machinery that can be provided for the purpose. But the hope may nevertheless be expressed that the importance of machinery of this kind will not be exaggerated, for even the best devised will be almost useless if the temper and outlook of those for whom it is planned are hostile and misguided. Good-will, good faith, and the recognition on both sides of a common interest between them, and, if possible, of the common welfare, are the really effective and lasting solvents of industrial conflict.

THE underlying problem of the Port of London, as of many others, is that of casual labour, and one effect of the recent strike has been that the steps initiated under the older Dock Board, and more recently fostered by the new Port of London Authority, to place its workers on a more satisfactory footing, have been swept away. The nucleus of men with their special beneficiary conditions of regular employment, holiday allowance, and pensions no longer exists, and, technically, the conditions of casual employment again prevail throughout the Port. Differential treatment always tends, it is true, to bring special risks in its train, but the system that had been carefully developed during several years was sound in principle and capable of much future extension.

WHILE, however, in London there has been a set-back towards the conditions of casual employment, it is all the more satisfactory to be able to note the important constructive effort towards decasualisation that has been, on the whole, successfully launched elsewhere, and most notably at Liverpool. At this port practically all dock labourers before they can secure employment must now be furnished with a tally; payments of wages can be, and to a great extent are, paid in a lump sum through a clearing-house system, no matter for how many employers the man may have worked during the week; and through the same clearing-house the charges due from employers under the National Insurance Act are also pooled and apportioned. By a plan of telephonic communication, and the establishment of stands for disengaged labour, the maximum of regularity in employment possible will, it is hoped, be secured. The scheme is one of

considerable hopefulness, and the ultimate aim of decasualisation will be gradually secured through the regulation in the future, on the authority of a joint committee of ship-owners and representatives of the dock labourers, of the issue of tallies in accordance with the labour needs of the Port. The general scheme bids fair to be beneficial to all concerned, and its inception has been made possible only through the co-operation of ship-owners and the Dockers' Union, and of the Board of Trade—the last named being represented through its Labour Exchanges.

Good trade, the industrial unrest, an active propaganda, and a tendency in some occupations to accentuate the difficulty of the position of the non-unionist, are among the influences that have led to a noteworthy expansion of trade-union membership, the total at the end of 1911 exceeding three millions, and representing the large increase of 23·3 per cent. as compared with the previous year. Among the trades in which the largest percentage increases took place were various labour groups, notably transport workers, builders' labourers, and general labourers. Among the miners in Lancashire and Cheshire, cotton weavers, and wood-workers, considerable increases also took place, and, for the first time since 1900, an increase, mainly (in addition to the builders' labourers) among carpenters and joiners, is shown in the building trades group, after a continuous decline during the preceding eleven years. It may be noted that the membership among miners in Wales and Monmouth decreased 12·3 per cent. The general expansion in trade-union membership that has been taking place is reflected in the numbers represented at the Trade Union Congress, opened on September 2nd, which, with some five hundred delegates representing a membership of nearly two millions, is one of the largest and most representative Congresses so far held.

It is officially announced that the second Census of Production will be taken in 1913 in respect of production carried on in the present year. The schedules to be issued to manufacturers and others will cover in the main the same ground as those used for the first census, but the instructions have been simplified and the length of the schedules somewhat reduced.

In the recently published *Livre Foncier de Paris* is found a mass of information as to the number and value of Paris build-

ings. On January 1st, 1890, there were 810,468 dwellings in Paris, representing a total rental of some £17,444,079. On January 1st, 1901, the dwellings numbered 910,504, and the rental was £20,062,987. On January 1st, 1911, the number was 993,304, and the rental £23,186,400. Of these totals 37,447, with a rental of £932,816, were vacant on January 1st, 1890. On January 1st, 1901, the figures were 26,633 vacant dwellings, with a rental of £886,665; while on January 1st, 1911, the number was only 8,327, with a rental of £490,049. From 1890 to 1911 the population of Paris increased 19 per cent., while the number of dwellings increased more rapidly, namely, by 182,836, or 22 per cent. The number of vacant dwellings has nevertheless decreased in the same period from 4.62 per cent. of the total to less than 1 per cent. While in 1890 the average number of occupants of each dwelling was 3.09, in 1911 it was only 2.89.

THE currency reform recently carried through in Chili has some points of interest, and differs in some important respects from the systems which have been set up in Argentine and Brazil. The *Bankers' Magazine* for July publishes a translation of the law constituting the Oficina de Emision, May, 1912. The new notes can be obtained at the rate of 12d. per peso, but only by banks and by them only to an amount not exceeding their effective capital. There is no guarantee that the peso will be permanently maintained at 12d., and if the peso of legal currency is quoted at a higher rate, the bank which originally drew the notes must deposit a further sum. The notes can be obtained in London as well as in Santiago, but can only be cashed by the original depositors where they deposited them, and at thirty days' notice. The gold may be held in the government treasury, at the Bank of England, at Messrs. Rothschilds', or in any other bank of first-class standing.

THE fifth International Congress of Mathematicians, which was held last August in Cambridge, deserves notice in this JOURNAL in virtue of the subsection which dealt with mathematical economics and some other subjects which may be considered adjacent thereto as specially concerned with human interests. The creation of such a subsection at a Congress of Mathematicians is indeed significant. As a President of the subsection said, Economic Science, which had hitherto, as it were, sat below the salt at the feast of reason, was now invited to "go up higher."

He added that this recognition was appropriately made in Cambridge, where Professor Marshall had proved the fruitfulness of mathematical reasoning in Economics. Among the contributions to the subsection may be specially noticed a study on the disturbance of economic equilibrium, by Prof. Lehfeldt, of Johannesburg, whose name will be familiar to our readers. Dr. Amoroso, of Rome, illustrated the distribution of incomes or diffusion of wealth, by a daring use of partial differential equations, such as are employed with success in the theory of heat and other physical sciences.

THE School of Sociology and Social Economics, which has for nine years carried on the work of training those who wish to take part in the various forms of social and philanthropic effort, is about to be merged in the London School of Economics and Political Science. The new course will begin at the commencement of October.

THE London School of Economics offer a prize of £100, open to all without restriction, for the best essay submitted by July 31st, 1913, on one of certain topics. Inquiries should be addressed to the Secretary of the London School of Economics, Clare Market, London

APPOINTMENTS.—Mr. H. M. Hallsworth, M.A., B.Sc. (Manchester), has been appointed first Professor of Economics at Armstrong College, Newcastle-on-Tyne, to fill the chair founded in memory of the late Sir David Dale. Mr. Hallsworth graduated at Manchester University in 1901, and has published a volume on *Unemployment in Lancashire* in collaboration with Professor Chapman. Since 1910 he has held the G. B. Hunter lectureship in commercial and industrial economics at Armstrong College, and has organised the department of economics there. There is now a proposal to establish a Faculty of Commerce at the College, and it is announced that £1,000 has been offered towards this object.

MR. J. A. TODD, B.L. (Glasgow) has been appointed Professor of Economics at University College, Nottingham, a post lately created. Mr. Todd has been lecturer in Political Economy at the Khedivial School of Law, Cairo.

DR. EDWARD A. LEWIS, D.Sc. (Lond.), has been appointed Professor of Economics at University College, Aberystwyth.

MR. A. J. SARGENT, M.A., has been appointed Professor of Commerce in the University of London, to teach at the London School of Economics.

MR. R. H. HOOKER, M.A., has been appointed Newmarch Lecturer in Statistics at University College for the session 1912-13. The subject of his lectures will be "The Food Supply of the United Kingdom."

MR. HENRY CLAY, B.A., University College, Oxford, and Mr. R. S. Dower, M.A., Trinity College, Cambridge, have been appointed University Lecturers in the Department of Economics at Leeds, with special reference to new courses of instruction in social organisation and public service.

MR. STANLEY HORSEMAN TURNER, at present lecturer on Political Economy in the University of Aberdeen, has been appointed Deputy Chief Inspector for Scotland under the National Health Insurance Commissioners for Scotland.

A SUCCESSOR to Professor J. A. Todd at the Khedivial School of Law, Cairo, is about to be appointed at a stipend of £615.

A PROFESSOR of History and Economics is to be appointed in the University of Western Australia at a stipend of £800 and a house allowance of £100 if not provided with residence. Applications should be sent to the Agent-General for Western Australia, London, from whom particulars can be obtained, before October 15th.

THE Committee for Rural Economy in the University of Oxford will proceed early in October to appoint a Director of the Agricultural Economics Institute, to be established by the University in conjunction with the Board of Agriculture and the Development Commission, at a stipend of £600. Applications should be sent to the Secretary, School of Rural Economy, Oxford, before September 30th.

RECENT PERIODICALS AND NEW BOOKS.

The Economic Review.

- JULY, 1912. *The Voluntary Social Worker and the State.* R. C. DAVISON. *The Landlords, the Labourers, and the Land.* W. H. R. CURTLER. *Reflections on a Pamphlet entitled "The Miners' Next Step."* A. J. JENKINSON. *Profit-sharing in Operation.* J. L. STOCKS. An account of the scheme of Messrs. J., T., and J. Taylor, woollen manufacturers of Batley. *Statistics and the Theory of Money.* D. A. BARKER. A reply to Professor Ashley's criticism of Professor Irving Fisher.

The Statistical Journal.

- JUNE, 1912. *British Railways: their Accounts and Statistics.* W. M. ACWORTH and GEORGE PAISH. With a discussion by some eminent railway authorities. *Some Statistics of Juvenile Employment and Unemployment.* ARTHUR GREENWOOD and J. E. KETTLEWELL. Based on the statistics of vacancies for juveniles filled by the Labour Exchanges, which are published monthly in the *Labour Gazette*.
- JULY, 1912. *The Measurement of Employment an Experiment.* A. L. BOWLEY. An examination as to whether the considerable body of information, much of it non-numerical, relative to employment, which is collected by the Labour Department of the Board of Trade, can be made to produce a satisfactory index-number. Mr Bowley holds that his investigation supports the opinion that the Labour Department's own number, though the data on which it is founded are partial, is, on the whole, a surprisingly good index of employment as a whole. An important contribution to statistical method, as well as to the subject of the statistics of employment, followed by a very interesting discussion, in which Professor Edgeworth, Mr. Yule, Mr. Chiozza Money, and Professor Taussig took part.

Journal of the Institute of Bankers.

- JUNE, 1912. *Agricultural Credit Banks.* O. R. HOBSON. Awarded a first prize by the Institute.

Bankers' Magazine.

- AUGUST, 1912. *Partners in Banks.* Gives the number of shareholders in the principal Joint Stock Banks in 1902, 1907, and

1912, and discusses the great increase shown. *Bank of France Report. Imperial Bank of Germany Report.* Translations of the detailed official reports.

Transactions of Liverpool Economic Society (Northern Publishing Co., Liverpool).

SESSIONS 1910-11 AND 1911-12. *The Problem of Women's Wages: an Enquiry into the Causes of the Inferiority of Women's Wages to Men's.* ELEANOR F. RATHBONE. A full and interesting analysis. *The Problem of Unemployment.* S. J. CHAPMAN. On the question how far variations in labour demand is met by short time. *Upward Mobility of Labour as Evidenced in the Lancashire Cotton Industry.* F. J. MARQUIS. On the same data as those presented in a paper to the Royal Statistical Society. *The Liverpool Docks Problem.* R. WILLIAMS. Reviewed in THE ECONOMIC JOURNAL, June, 1912.

The Sociological Review.

JULY, 1912. *Discussion on Syndicalism*, in which Mr. Graham Wallas, Mr. Balfour, Mr. J. A. Hobson, and Mr. Ramsay Macdonald took part.

The Women's Industrial News.

JULY, 1912. *Women's Wages* (20 pp). DOROTHY M. ZIMMERN. Based partly upon Government publications, and partly upon a private investigation carried out by the Women's Industrial Council and the Apprenticeship and Skilled Employment Association.

The American Economic Review (Boston).

JUNE, 1912. *Report of the Tariff Board on Wool and Woollens.* F. W. TAUSSIG. Professor Taussig examines the doctrine of "Scientific Protection" with reference to these special industries. "*The Equation of Exchange*" for 1911, and *Forecast.* IRVING FISHER. Professor Fisher brings up to date the statistics of his recent book. *Ninth List of Doctoral Dissertations in Political Economy.* About 180 in number.

Political Science Quarterly (New York).

JUNE, 1912. *Interest and Profits in Rate Regulation.* H. T. LEWIS. A discussion of the practice of the Wisconsin Railroad Commission. *The British National Insurance Act.* EDWARD PORRITT.

Annals of American Academy (Philadelphia).

JULY, 1912. *Industrial Competition and Combination.* A series of papers dealing with (1) The effect of Industrial Combinations on Labour Conditions; (2) Competition as a Safeguard to National Welfare; (3) The relation of Industrial Combinations to National Welfare; (4) The Policy of Great Britain, Canada, and Germany as compared with that of the United States with reference to Industrial Combinations; (5) The effect of the

Sherman Anti-Trust Law on Business; (6) The elements of a Constructive National Policy.

The Journal of Political Economy (Chicago).

JUNE, 1912. This number contains a further instalment of papers on the relation of Trusts to the Law read before the Western Economic Society in March, 1912, including the following:—*The Trust Problem—Prevention versus Alleviation.* CHESTER W. WRIGHT. *Political Obstacles to Anti-Trust Legislation.* H. PARKER WILLIS. *Labor Organisations and the Sherman Law.* JAMES A. EMERY.

JULY, 1912. *The Distribution of Immigrants in the United States before 1870.* T. W. PAGE.

Bulletin of the Bureau of Labour (Washington).

NOVEMBER, 1911. *Review of Labor Legislation of 1911.* LINDLEY D. CLARK.

JANUARY, 1912. *Mediation and Arbitration of Railway Labor Disputes in the United States.* CHAS. P. NEILL. *Canadian Industrial Disputes Investigation Act of 1907. Conciliation and Arbitration of Railway Labor Disputes in Great Britain. Conciliation and Arbitration in Great Britain. Attitude of Employing Interests toward Conciliation and Arbitration in Great Britain.* A. MAURICE LOW. *Attitude of Labor toward Conciliation and Arbitration in Great Britain.* ARTHUR E. HOLDER. *Industrial Courts in France, Germany, and Switzerland.* HELEN L. SUMNER.

MARCH, 1912. *Wholesale Prices, 1890 to 1911.* The average of wholesale prices in 1911, as measured by the prices of 257 commodities, was 1·7 per cent. lower than the average for 1910, the fluctuations from month to month being very slight. The prices of metals and implements fell 7·7 per cent., and those of food, &c., rose 2 per cent.

MAY, 1912. *List of Industrial Poisons and Other Substances Injurious to Health found in Industrial Processes.*

Revue d'Économie Politique (Paris).

MAY–JUNE, 1912. *La Nature au point de vue économique.* E. SCHWIEDLAND. *La question agraire en Italie.* GEORGES BOURGIN. Continued from the preceding number. *L'exode de la ville.* G. BENOIT-LÉVY.

JULY–AUGUST, 1912. *Les grandes Régies d'État.* PAUL PIC. *Destutt de Tracy, économiste.* EDGARD ALLIX. *Hausses et Baisses générales des Prix.* JEAN LESCURE.

Journal des Économistes (Paris).

JUNE, 1912. FRÉDÉRIC PASSY. YVES GUYOT. *Le 70^e anniversaire de la Société d'économie politique.* LUCIEN COQUET. A very full account of the proceedings. *L'Évolution économique de la République Argentine.* GEORGES LAFOND. Continued in the numbers for July and August.

JULY, 1912. *Résultats généraux du Censur des États-Unis*. YVES GUYOT.

AUGUST, 1912. *La Solution économique des grèves*. YVES GUYOT.

L'Économiste Français (Paris).

JUNE 8, 1912. *De la nécessité d'une énergique et méthodique action sociale pour arrêter la décroissance de la natalité et prévenir la dépopulation ou la dénationalisation de la France*. PAUL LEROY-BEAULIEU. *Le Jubilé de la Société d'Économie politique de Paris*. The orations of M. Paul Leroy-Beaulieu and M. Yves Guyot are printed in full.

JULY 20 AND AUGUST 3, 1912. *La production, la consommation et les prix des divers métaux durant les dix dernières années*. I., Cuivre et plomb; II., Zinc, étain, aluminium et nickel. EDOUARD PAYEN.

AUGUST 3 AND 10, 1912. *La Crise des Valeurs fondamentales*. PAUL LEROY-BEAULIEU.

Revue Économique Internationale (Brussels).

MAY, 1912. *Une des Industries intellectuelles de Paris—La grande Couture*. PIERRE MILLE. On the dressmaking industry of Paris. *Régime et fonctions économiques des chemins de fer d'ordre inférieur*. H. DE WITTEK. On light railways. *Le crédit agricole aux indigènes dans les Colonies*. A. ZIMMERMANN.

JUNE, 1912. *Politique d'Escompte*. DR. VON LUMM. Banks of issue and the rate of discount. *Les Banques d'Emission et leur évolution contemporaine*. BERTRAND NOGARO. *La Baisse de la Rente Belge*. M. ANSIAUX. A study of the fall in recent years in the Belgian Funds.

JULY, 1912. *La Route des Indes et l'Impérialisme Anglais*. LEON HENNEBICQ. A brief historical study of the influence of the Indian trade on British Imperialism. *La Politique douanière des États des Balkans*. RENÉ GONNARD. *Mesures complémentaires de la politique d'Escompte*. DR. VON LUMM. *L'Industrie et la question monétaire en Belgique*. MAX L. GÉRARD. Belgium is suffering from an excessive exportation of capital. *La Régie appliquée aux usines d'électricité*. H. MARCHAND.

La Vie Internationale (Brussels).

PART I., 1912. The first number of a new monthly, which proposes "de suivre en ses multiples aspects le vaste mouvement des idées, des faits et des organismes qui constituent la vie internationale." This number, which includes an article by Lord Haldane on Great Britain and Germany, does not contain much of specifically economic interest.

Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft
(Leipzig).

PART II., 1912. *Der Kampf um das sittliche Werturteil in der Nationalökonomie*. H. HERKNER. A contribution to the latest German form of the controversy on the scope and method of

Economics, with reference to the views of Sombart and Weber,' and to Professor Pohle's attack on "Kathedersozialismus." *Die Erfahrungen des letzten Jahres für die Kriegsbereitschaft des deutschen Geld- und Kapitalmarktes.* FELIX SOMARY. *Deutsche Volksernährung im Kriege.* G. FRÖHLICH. Germany also has her problem of food supply in time of war. The author, who mainly has in mind a war with England, quotes a long passage from an article in the *Saturday Review* of September 11, 1897, which concluded with the words: "Germaniam esse delendam," and alleged that "if Germany were extinguished to-morrow, the day after to-morrow there is not an Englishman in the world who would not be richer." He holds that this passage "besser als alles andere englische Gesinnung und englische Wünsche zeigt." *Wieviel Menschen kann die Erde ernähren?* KARL BALLOD. *Die Währung in den Straits Settlements* (47 pp.). An account of the establishment of the Gold Exchange Standard and of the events leading up to it. *Aerzte und Versicherungskassen: Die Regelung des Verhältnisses der Aerzte zu den Versicherungsträgern unter Berücksichtigung der Reichsversicherungsordnung und ihrer Entwürfe.* W. VON GELDERN. An account, interesting in relation to the difficulties with the doctors under the National Insurance Act, of the parallel difficulties which have been encountered in Germany. *Der Werftarbeiterstreik vom Jahre 1910.* H. THIELE. *Hauswirtschaftliche Nahrungsmittelkonsumption.* RENETTA BRANDT-WYT. *Deutsche und Polen in der Provinz Posen nach der Berufszählung des Jahres 1907* (56 pp.). F. SWART. *An Georg Friedrich Knapp, zu seinem siebenzigsten Geburtstag am 7 März 1912.* GUSTAV SCHMOLLER. "Sie sind einer der objektivsten Menschen, die mir je vorgekommen sind." *Aus der neueren sozialpolitischen Literatur* (20 pp.). GUSTAV SCHMOLLER. A survey of recent German literature on this subject.

PART III., 1912. *Reform der Reichsbank?* (78 pp.). FRANZ WERNER.

Jahrbücher für Nationalökonomie und Statistik (Jena).

APRIL, 1912. *Induktives und Deduktives zum Bevölkerungsproblem.* F. OTH. *Gründe für die agrarische Sonderentwicklung der deutschen Ostens.* A. THAUSING.

MAY, 1912. *Die deutsche wirtschaftsgeschichtliche Literatur und der Ursprung des Marxismus.* S. v. BELOW. *Die Frauenarbeit in der deutschen Volkswirtschaft.* J. SCHELLWEIN. *Ueber die Arbeitsleistung und das Verhältnis von Arbeitslohn und Arbeitszeit zur Arbeitsleistung im Maurergewerbe (nach Beobachtungen in Göttingen).* B. QUANTZ.

JUNE, 1912. *Die Entwicklung von Fleischerzeugung und Fleischverbrauch auf dem Gebiete des heutigen Deutschen Reiches seit dem Anfang des 19. Jahrhunderts und ihr gegenwärtiger Stand.* J. B. ESSLER. *Das "Underwriting" bei englischen Gründungen.* OTTO HEYMANN.

JULY, 1912. *Das Zurückgehen der Bedeutung der Zentralnotenbanken.* SVEN HELANDER. *Der englische Kohlenstreik.* F. W.

HIRST. *Ueber die Reform der Grundsteuern in Grossbritannien und Irland*. J. C. STAMP. *Die Entwicklung des Preisniveaus und des Getreidebedarfs in England und Deutschland in den letzten Dezennien*. Conrad's index number has risen (on the 1879-83 basis) from 94.3 in 1910 to 102.9 in 1911 and (on the 1879-89 basis) from 97.7 to 106.2. Both index numbers are now about two points above the level of 1907. This very large rise in Germany may be compared with the slight fall in the index number published by the United States Bureau of Labour (referred to above). *Eine neue Begründung der Quantitätstheorie* (10 pp.). V. FURLAN. An uncritical summary of Professor Fisher's "Purchasing Power of Money."

GENERALREGISTER 3te FOLGE, Bd. XXI-XL. Bearbeitet von Bibliothekar Peter Schmidt. Jena: Fischer. 1912. M. 7.

Archiv für Sozialwissenschaft und Sozialpolitik (Tübingen).

MAY, 1912. *Die Technik im Zeitalter des Früh-Kapitalismus* (40 pp.). WERNER SOMBART. A learned and much documented discussion of the mechanical inventions and technical improvements of the sixteenth and seventeenth centuries. The first of two articles. *Das Ertragsgesetz der industrie*. THEODOR VOGELSTEIN. The first of two articles on the doctrine of increasing return in industry, chiefly with reference to the work of the principal English and American economists, the author's leading ideas having partly arisen "im Verfolg von Gedankengängen Marshall's und J. B. Clark's." The present article is mainly concerned with the literary history of the doctrine. *Ueber den Rückgang der Geburten- und Sterbeziffer in Deutschland* (69 pp.). PAUL MOMBERT. An important article mainly concerned with controverting the views of Professor Oldenberg on the causes underlying the birth-rate in Germany and on the outlook for the future. It is followed by a reply from Professor Oldenberg and a further rejoinder from Professor Mombert. A bitter but interesting controversy. *Ueber die Stellung des Handels in der modernen industriellen Entwicklung*. EDGAR LANDAUER. *Handelsbetriebslehre oder Privatwirtschaftslehre*. W. PRION. A discussion of the curriculum and text-books in commerce as they have been developed in the Handelshochschule of Germany with special reference to the writings and influence of Professor J. F. Schär of the Handelshochschule in Berlin.

JULY, 1912. *Fleischteuerung und Getreidezölle*. PROF. J. B. ESSLER. *Die Bevormundung der gesetzgebenden Gewalt durch die Gerichte und die Trustfrage in den Vereinigten Staaten* (80 pp.). L. B. BOUDIN. *Versuch einer reinen und realistisch-empirischen Theorie des Konsumentenmonopols*. EMIL LEDERER. *Kritische Betrachtungen zum Streite über Bevölkerungsproblem*. ARTHUR SALZ. *Berufswahl und Berufsschicksal des modernen Industriearbeiters* (54 pp.). MARIE BERNAYS. The first of two articles. *Das Mindestlohnsgesetz im englischen Kohlenbergbau*. L. PUMPIANSKY. *Italienische Agrarprobleme*. R. LEONHARD. *Die moderne Finanz im Lichte der Marxschen Theorie*. EDUARD BERNSTEIN.

Annalen für Soziale Politik und Gesetzgebung (Berlin).

- PART VI., 1912. *Der britische Kohlenstreik.* CONSTANCE SMITH. *Die wirtschaftliche Seite der Alkoholfrage.* PROF. MAX KASSOWITZ. *Zur Politik und Literatur der Wohnungsfrage.* PROF. C. J. FUCHS. A survey of the literature of 1911 and the first quarter of 1912.

Zeitschrift für Volkswirtschaft, Sozialpolitik und Verwaltung (Vienna).

- PART III., 1912. *Die neuere Gesetzgebung über die Heimarbeit unter besonderer Berücksichtigung der österreichischen Regierungsentwürfe.* E. CRONBACH. Continued from Part II. *Der Wohnungsfürsorgefonds.* A. J. FUCHS. •
- PART IV., 1912. *Sozialreform und öffentliche Meinung in England.* MARY AGNES HAMILTON. *Das landwirtschaftliche Genossenschaftswesen in Oesterreich.* R. VON FÜRER.

Zeitschrift für die gesamte Staatswissenschaft (Tübingen).

- PART II., 1912. *Der deutsche Staatsbahnwagenverband.* FRANZ KARL.
- PART III., 1912. *Kritische Beleuchtung der modernen Wert- und Preistheorie.* E. KELLENBERGER. Schumpeter receives more attention in this account than any other writer. *Dänische Viehverwertungsgenossenschaften.* W. HEINZE. *Stellung und Aufgabe der Verkehrssteuer im Systeme der Finanzwissenschaft.* E. H. VOGEL. *Monopoltendenzen in der deutschen elektrotechnischen Industrie.*

De Economist (The Hague).

1912. *De betoekenis van de Brusselsche suikerovereenkomst voor Nederland.* J. A. V. BARMEN 'T LOO. A series of four articles in the issues for February, March, May, and June.

Giornale degli Economisti (Rome).

- MARCH, 1912. *Delle pubbliche imprese . . .* V. TANGORRA. This discussion of State Industries will form a chapter in the author's forthcoming treatise on the science of finance. *Relazioni fra entrata e consumo.* G. DEL VECCHIO. Continued from the preceding number. *I problemi fondamentali dell' economia finanziaria.* ROBERTO MURRAY.

La Riforma Sociale (Turin).

- MAY, 1912. *Il "Paretaio."* P. JANNAONE. With a raciness of style which defies translation, Professor Jannacone denounces the servile imitators of the too fashionable Professor Pareto.
- JUNE, 1912. The Supplement comprises the annual summary dealing with Italian economic life; with statistics of commerce, agriculture, banking, finance, &c., and a bibliography of new publications.

NEW BOOKS.

English

ALLSOPP (HENRY). *An Introduction to English Industrial History.* London: Bell. 1912. Pp. 151. 2s.

BARBOUR (SIR DAVID). *The Standard of Value.* London: Macmillan. 1912. Pp. 242. 6s. net.

[To be reviewed.]

BUTLER (C. VIOLET). *Social Conditions in Oxford.* London: Sidgwick and Jackson. 1912. Pp. 262. 4s. 6d. net.

[To be reviewed.]

CLAY (SIR ARTHUR). *Syndicalism and Labour.* Fourth (abridged) edition. London: John Murray. 1912. Pp. v+166. 1s. net.

[A cheaper, abridged edition of the volume originally published in August, 1911.]

COX (HAROLD). *Labour Unrest. British Constitution Association.* 1912. Pp. 16. 2d.

[Reprinted from the *Daily Graphic* and *Sheffield Daily Telegraph*. Reviewed above.]

CUNNINGHAM (W.). *The Causes of Labour Unrest and the Remedies for it.* London: John Murray. 1912. Pp. 29. 6d. net.

[The draft of a Report prepared by the Archdeacon of Ely for the Committee on the Moral Witness of the Church on Economic Subjects. Reviewed above.]

DAWSON (W. HARBUTT). *Social Insurance in Germany, 1883-1911.* London: Fisher Unwin. 1912. Pp. xi+283. 6s. net.

[“Its History, Operations, Results, and a comparison with The National Insurance Act, 1911.” Reviewed above.]

FOSTER (WILLIAM). *The English Factories in India 1637-1641: a Calendar of Documents in the India Office, British Museum, and Public Record Office.* Oxford: The Clarendon Press, 1912. Pp. xlvi+339. 12s. 6d. net.

[The sixth volume of Mr. Foster's work. To be reviewed.]

HIGGINS (A. PEARCE). *War and the Private Citizen: Studies in International Law.* London: P. S. King. 1912. Pp. xvi+200. 5s. net.

[A Volume, intended to be not unsuitable to the general public and based on public lectures delivered at Cambridge and at the London School of Economics, which bears indirectly at several points on matters of economic interest—food supply in time of war, position of merchant ships, and the relation of neutrals to closed trade.]

HIRST (F. W.). *The Progress of the Nation*, by G. R. Porter. A completely new edition revised and brought up to date. London: Methuen. 1912. xvi+735. 21s. net.

[Reviewed above.]

KNOOP (DOUGLAS). *Principles and Methods of Municipal Trading.* London: Macmillan. 1912. Pp. xvii+409. 10s. net.

[Reviewed above.]

LEWIS (ARTHUR D.). *Syndicalism and the General Strike*. London: Fisher Unwin. 1912. Pp. 320. 7s. 6d. net.

ORR (JOHN). *Taxation of Land Values, as it affects Landowners and Others*. London: P. S. King. 1912. Pp. x+116. 1s. net.

[The author contends that "rates and taxes, howsoever levied, are ultimately a deduction from the rent of land. It is, therefore, in the interests of landlords themselves that they should be imposed directly upon the basis on which they inevitably rest." "The value of land increases under the taxation of land values." "Ricardo's definition of rent is shown to be quite inadequate, and a new definition is given"—namely, that the economic rent is the landowner's rent *plus* rates and taxes.]

PEASE (EDWARD R.). *Gold and State Banking: a Study in the Economics of Monopoly*. London: The Fabian Society. 1912. Pp. 19. 1d.

[Fabian Tract No. 164. Mr. Pease points out that "by one of those odd blindnesses common amongst economists, the fact that the exchange value of gold varies from place to place is commonly disregarded." After examining, in the light of this, various theories of the relation of gold to prices, he is "forced to the apparently absurd conclusion that the value of gold in any given locality is not determined by any general cause at all, but depends on local custom,"—by *custom* being meant "that which exists owing to the habits of thought of the people of a district." With courage worthy of a metaphysician Mr. Pease accepts the conclusion to which pure reason has led him. Proceeding to the study of banks, he thinks that recent bank amalgamations in England portend an eventual banking monopoly, which the State shall take over. This bank will have no need of deposits, the necessity for which only arises when there are two or more banks, and will be able to make loans at a charge not higher than is necessary to pay expenses,—one and a half per cent. at the utmost.]

PIM (FREDERIC W.). *The Railways and the State*. London: Fisher Unwin. 1912. Pp. 302. 5s. net.

[By the Chairman of the Dublin and South-Eastern Railway. Of twelve chapters, four are substantially the evidence submitted by the author to the Viceregal Commission on Irish Railways. Reviewed above.]

Royal Statistical Society. *Infantile Mortality*. London: Royal Statistical Society. 1912. Pp. 61. 1s.

[The report of a Committee appointed "to enquire into the systems adopted in different countries for the registration of births (including still-births) and deaths with reference to infantile mortality."]

SALMON (STANLEY). *An Introductory Economic History of England*. London: Longmans, Green. 1912. Pp. vi+130. 1s. 6d.

[Intended primarily for school use. "The first five chapters present a general sketch of Economic History; the last six are each devoted to one important topic. A course of lessons including the substance of this book, has been given successfully by the writer to a sixth form for three years."]

TILLET (BEN). *History of the London Transport Workers' Strike, 1911*. London: National Transport Workers' Federation. 1912. Pp. 71. 4d.

[A useful narrative of events. The most interesting parts are Mr. Tillett's Biographical Notes on his colleagues amongst the men's leaders and his appreciations of the personalities of the Strike. The following is an example:—"We had had a good time at the Board of Trade. Sir George Askwith, the patient, plodding man, with pigeon-holes in his brains; who listened without sign of being bored or absorbed, who concealed his mind like a Chinaman. Emotionless,

except that he would peer through his glasses at someone making a statement of moment, never raising his diplomatic voice, or appearing to hurry over anything; guiding without falter or apparent effort the disputants however heated they may be, himself the inscrutable, patient listener. And such patience! It was more than dour in its persistence and calmness; it compelled by its coldness, and saved us from the bickerings on occasions when the wisest become puny and spiteful. He is the most dangerous man in the country. His diplomacy is and will be worse than war. Unless it absolutely succeeds in forcing industrial combatants to appreciate the human oneness of the community it will be a danger, inasmuch as it will make with its great genius for a peace that after all will be artificial.”]

• **TOKE (LESLIE A. ST. C.)**, Edited by. *The Housing Problem*. London: P. S. King. 1912. Pp. 67. 6d. net.

[No. III. of *Catholic Studies in Social Reform*, edited by the Catholic Social Guild.]

WEBB (M. DE P.). *Britain's Dilemma. High Prices: Strikes. Dear Money: Stagnation*. London: P. S. King. 1912. Pp. xv+262. 7s. 6d. net.

[This book is on the subject of Indian Currency. Mr. Webb desires gold to be minted in India, the Gold Standard Reserve to be kept in India and in gold, and the present system of regulating currency by means of the exchanges to be abandoned. He argues that the policy of the India Office has been dictated by the supposed interests of the London Money Market, and specially criticises the great increase in the amount of the cash balances now held in London and lent out for short periods at a low rate of interest. Those who think that currency policy in India has been mainly wrong will be delighted by Mr. Webb's vigorous methods of criticism, and those who think that this policy has been mainly right will find here a considerable number of useful and authentic facts.]

• **WELLS (H. G.)**, *Labour Unrest*. London: Associated Newspapers. 1912. Pp. 32. 1d.

[Reprinted from the *Daily Mail*. Reviewed above.]

What the Worker Wants: The Daily Mail Enquiry. London: Hodder and Stoughton. 1912. Pp. viii+160. 6d.

[On May 13th, 1912, the *Daily Mail* opened its columns to an inquiry into the causes of Labour Unrest. Mr. H. G. Wells led off with the series of articles reviewed above. He was followed by a great number of writers, whose contributions are here reprinted, including Mr. Snowden, the Duke of Marlborough, Professor Ashley, Mr. Hyndman, Mr. Norman Angell, Lord Hugh Cecil, Mr. Rowntree, Mr. Galsworthy, Mr. Vernon Hartshorn, and a number of headmasters. (“Wake up, Gentlemen!” by the Headmaster of Rugby, “Not Patronage, but Friendship,” by the Headmaster of the Leys, &c.). Economists will find here an admirable synopsis of the popular psychology of the subject.]

WILSON (SIR ROLAND K.) and LEVY (J. H.). *Individualism and the Land Question: a Discussion*. London: Personal Rights Association. 1912. Pp. 114. 1s. net.

[A paper by Sir R. K. Wilson (28 pp.) read to the Personal Rights Association in October, 1910, followed by a discussion.]

YULE (G. UDNY). *An Introduction to the Theory of Statistics*. Second edition, revised. London: Charles Griffin. 1912. Pp. xv+381. 10s. 6d. net.

[Mr. Yule has taken advantage of the demand for a second edition to recast certain paragraphs, to correct errors, and to make one or two slight additions. Reviewed in the *Economic Journal*, Vol. XXI, p. 263.]

American

BLAKEY (ROY G.). *The United States Beet-Sugar Industry and the Tariff.* (Columbia University Studies.) New York: Longmans, Green. 1912. Pp. 286. 8s. net.

[The author states that he has paid most attention to the three main factors which will determine the future development of the United States beet-sugar industry, namely: agricultural conditions, cane-sugar competition, and modifying legislation. His study contains a good deal of technical detail, mainly agricultural in interest; but on the economic side there are discussions of the influence of freight rates, of the Sugar Trust, and of the effect of the tariff on prices.]

BURCH (HENRY REED) and NEARNG (SCOTT). *Elements of Economics: with special reference to American Conditions.* New York: The Macmillan Co. 1912. Pp. xvii + 363.

[For the use of High Schools. To be reviewed.]

FISHER (IRVING). *Elementary Principles of Economics.* New York: The Macmillan Co. 1912. Pp. 531. 8s. 6d. net.

[To be reviewed.]

HAYNES (GEORGE EDMUND). *The Negro at Work in New York City: a Study in Economic Progress.* (Columbia University Studies.) New York: Longmans, Green. 1912. Pp. 158. \$1 25.

HULL (GEORGE H.). *Industrial Depressions: their Causes Analysed and Classified, with a Practical Remedy for such as Result from Industrial Derangements; or Iron the Barometer of Trade.* New York: F. A. Stokes. 1911. Pp. xiv + 287. \$2.75.

[A suggestive work, developing the thesis that industrial, as opposed to financial depressions, are brought about by high prices for the materials of construction, the chief symptom being a high price for iron.]

KUHN (ARTHUR K.). *A Comparative Study of the Law of Corporations with particular reference to the Protection of Creditors and Shareholders.* (Columbia University Studies.) New York: Longmans, Green. 1912. Pp. 173. \$1.50.

RAPER (PROFESSOR C. L.). *Railway Transportation.* New York: G. P. Putnam. 1912. Pp. x + 331. 6s. net.

[“A History of its Economics and of the Relations to it of the State and of the Nation. Based, with the Author's permission, upon President Hadley's *Railroad Transportation*.” To be reviewed.]

RUBINOW (I. M.). *Studies in Workmen's Insurance: Italy, Russia, Spain.* New York: 1911.

[This volume contains those chapters in the Twenty fourth Annual Report of the United States Commission of Labour on *Workmen's Insurance and Compensation Systems in Europe* which were contributed by Mr. Rubinow. They constitute a valuable work of reference on the details of some of the less familiar systems of Workmen's Insurance.]

SIMS (NEWELL LEROY). *A Hoosier Village: a Sociological Study with special reference to Social Causation.* (Columbia University Studies.) New York: Longmans, Green. 1912. Pp. 181. 6s. net.

[The identity of the particular village is veiled under the name Atou.]

TAYLOR (F. W.). Shop Management. New York: Harper. 1911. Pp. 207. \$1.50.

[A further work by the author of *The Principles of Scientific Management*, which is reviewed above. A reprint with additions of a paper read to the American Society of Mechanical Engineers in 1903.]

Tsu (YU-YUE). The Spirit of Chinese Philanthropy: a Study in Mutual Aid. (Columbia University Studies.) New York: Longmans, Green. 1912. Pp. 122. \$1.

VINEBERG (SOLOMON). Provincial and Local Taxation in Canada. (Columbia University Studies.) New York: Longmans, Green. 1912. Pp. 171. \$1.50.

French

ANTONELLI (ETIENNE). Les Actions de Travail dans les Sociétés Anonymes à participation ouvrière. Paris: Félix Alcan. 1912. Pp. iv + 192. 2.50 fr.

[On co-partnership, with an introduction by M. Briand. Reviewed above.]

BELLETT (DANIEL). Illusions Socialistes et Réalités Economiques. Paris: Marcel Rivière. 1912. Pp. 198. 3 fr.

[The school of extreme individualism still flourishes, as it has for fifty years and more, amongst the orthodox economists of France. M. Bellelt is even prepared to extol strikes as "un résultat de la libre discussion du prix de vente du travail," as against the socialistic dangers which hide beneath the banner, apparently so innocent, of arbitration. From compulsory arbitration he passes on to disparage other proposals for modifying the wage rate set up by the free action of competition (the premium system, sliding scales—even co-partnership) and concludes with some trenchant criticisms of the socialistic experiments in Australia, to which he is prepared to attribute all unfortunate things with the exception, duly specified, of the weather. Controversies in France between socialists and non-socialists are not confounded, as they so often are in this country, by the absence of hard and fast lines of division.]

GUÉRIN (L.). Les Industries Textiles de la France. Paris: Arthur Rousseau. 1912. Pp. 44.

[A lecture delivered to *Le Musée Social* and published as a supplement to their *Annales* for May, 1912.]

LÉVY (ROBERT). Histoire économique de l'industrie cotonnière en Alsace: Etude de Sociologie descriptive. Paris: Félix Alcan. 1912. Pp. xxiii + 313. 10 fr.

VERHAGEN (PIERRE). La Dentelle Belge. Brussels: Office de Publicité. 1912. Pp. 304.

[Published by the *Office du Travail* in the series of *Les Industries à Domicile*.]

German

BECKERATH (ERWIN VON). Die preussische Klassensteuer und die Geschichte ihrer Reform bis 1851. Munich: Duncker & Humblot. 1912. Pp. 104. M. 3.

[Schmoller's *Forschungen*, No. 163.]

BERLEPSCH-VALENDAS (E. VON). Die Gartenstadtbewegung in England, ihre Entwicklung und ihr jetziger Stand. Munich: R. Oldenbourg. 1912. Pp. xiii+190. M. 4.50.

[One of the first volumes of a new series entitled *Die Kultur des modernen England*, edited by Dr. Ernst Sieper under the auspices of the Anglo-German Committee for the promotion of friendly relations between the two countries. Other volumes which have already appeared deal with *Die geistige Hebung der Volksmassen in England*, *Volksbildung und Volkswohlfahrt in England*, and *Der Præ-Raphaelitismus in England*.]

BÖHM-BAWERK (EUGEN VON). Kapital und Kapitalzins. Zweite Abteilung: Positive Theorie des Kapitals. Dritte Auflage. Zweiter Halbband. Innsbruck: Wagner. 1912. Pp. viii+747. M. 21.

[To be reviewed. The first volume of the third edition was reviewed in the ECONOMIC JOURNAL, Vol. xx, p. 594.]

BRODA (PROF. R.). Inwieweit ist eine gesetzliche Festlegung der Lohn- und Arbeitsbedingungen möglich? Erfahrungen Englands, Australiens, und Kanadas. Berlin: G. Reimer. 1912. Pp. x+286. M. 4.

DAMASCHKE (ADOLF). Die Bodenreform: Grundsätzliches und Geschichtliches zur Erkenntnis und Ueberwindung der sozialen Not. Seventh revised edition. Jena: Gustav Fischer. 1912. M. 2.75.

[A new edition of a work very popular with German land reformers, now in its 16th to 20th thousand.]

Die Reichsbank 1876 bis 1910. Jena: Gustav Fischer. 1912. M. 8.

[A revised edition brought up to date of the official history of the Reichsbank from 1876 to 1900, which was published as a *Jubiläumsdenkschrift*. An English translation of this earlier version was published by the American Monetary Commission.]

EBERSTADT (PROF. R.). Neue Studien über Städtebau und Wohnungswesen. Jena: Gustav Fischer. 1912. M. 8.

[With reference to Belgium, Germany and Austria.]

FANCHERRE (HENRY). Die Händler-Rabattsparevereine: Studie über die praktischen Probleme der Mittelstandsbewegung. Jena: Gustav Fischer. 1912. Pp. vi+290. M. 7.50.

[Chiefly with reference to Germany and Switzerland.]

GARR (MAX). Die wirtschaftlichen Grundlagen des modernen Zeitungswesen. Vienna: Franz Denticke. 1912. Pp. 79. M. 3.

[The third instalment of *Wiener Staatswissenschaftliche Studien*, Vol. x. To be reviewed.]

GLEVE (C. E.), translated by. Die Kolonisation Sibiriens: eine Denkschrift von P. A. Stolypin und A. W. Kriwoschein. Berlin: Hermann Paetel. 1912. Pp. vii+163. M. 5.

[To be reviewed.]

HARMS (PROF. BERNHARD). Ennen und der Dortmund-Ems-Kanal, unter besonderer Berücksichtigung ihrer Bedeutung für Im-

port und Export im niederrheinisch-westfälischen Industriegebiet. Jena: Gustav Fischer. 1912. M. 7.

[*Schriften des Instituts für Seeverkehr und Weltwirtschaft an der Universität Kiel, VIII.*]

• LEISSE (DR. WILHELM). Wandlungen in der Organisation der Eisenindustrie und des Eisenhandels seit dem Gründungsjahr des Stahlwerksverbandes. Munich: Duncker & Humblot. 1912. Pp. 208. M. 4.

[Schmoller's *Forschungen*, No. 158.]

LEWIN (J.). Der heutige Zustand der Aktienhandelsbanken in Russland (1900-1910). Freiburg i. B.: H. M. Poppen. 1912. Pp. xi + 164

MELTZER (HANS).* Das Depositenwesen in Deutschland: Untersuchungen über die Liquidität der Depositen-Institute und die Sicherheit der Depositengelder. Jena: Gustav Fischer. 1912. Pp. 120. M. 4.

[To be reviewed.]

MISES (LUDWIG VON). Theorie des Geldes und der Umlaufsmittel. Munich: Duncker & Humblot. 1912. Pp. xi + 476. M. 10.

[To be reviewed.]

MOLL (DR. BRUNO). Zur Geschichte der englischen und amerikanischen Vermögenssteuern. Munich: Duncker & Humblot. 1912. Pp. 100. M. 3.

[To be reviewed.]

POPPELREUTER (R.) and others. Untersuchungen über das Volksparswesen. Munich: Duncker & Humblot. 1912. Pp. xviii + 602. M. 16.

[Seven studies of Savings Banks, etc., in various districts of Germany, being Vol. 136 of the *Schriften des Vereins für Sozialpolitik*. To be reviewed.]

REICH (DR. EMMY). Der Wohnungsmarkt in Berlin von 1840-1910. Munich: Duncker & Humblot. 1912. Pp. 160. M. 4.

[Schmoller's *Forschungen*, No. 164.]

RIESSER (DR.). Von 1848 bis heute: Bank- und finanzwissenschaftliche Studien. Jena: Fischer. 1912. Pp. viii + 141. M. 3.

[A popular and much abridged version of Dr. Riesser's "Die deutschen Grossbanken." To be reviewed.]

SCHILDER (DR. SIGMUND). Entwicklungstendenzen der Weltwirtschaft. Vol. I.: Planmassige Einwirkungen auf die Weltwirtschaft. Berlin: F. Siemenroth. 1912. Pp. viii + 393. M. 9.

[To be reviewed.]

Italian

GRAZIANI (A.). Teorie e fatti economici. Turin: Bocca. 1912.

MASCI (S.). La dottrina del valore di concorrenzi. Naples: Sangiovanni. 1912.

MORTARA (A.). I Doveri della Proprietà Fondiaria e la Questione Sociale. 3rd. edition. Turin: Unione Tipografica. 1912. Pp. xxviii + 452. L. 7.

[With an introduction by Prof. Achille Loria.]

PRATO (GIUSEPPE). Il Problema del Combustibile nel Periodo Pre-rivoluzionario come Fattore della Distribuzione topografica delle Industrie. Turin: Vincenzo Bona. 1912. Pp. 116.

[Reprinted from the *Memorie della Reale Accademia delle Scienze di Torino*.]

THE ECONOMIC JOURNAL

DECEMBER, 1912

CO-PARTNERSHIP IN INDUSTRY.¹

PROFIT-SHARING is still a very rare thing in the aggregate of all businesses. Its full extent and precise distribution among different industries will be exhibited in the Board of Trade Report, which at the time of the writing of this article was not yet published. But the preliminary notice² already issued of the first hundred schemes examined, makes it clear that there is to-day, as in 1894, the year of the last general report on the subject, the same variety of detail. In most of these hundred cases the total amount allotted for distribution is a fixed proportion of the net profits, though sometimes a minimum rate of remuneration is secured to capital before profit-sharing begins. There is much variation in the percentage of profit or surplus profit thus distributed, as also in the form which it takes. Sometimes the bonus is paid in cash, sometimes it is credited to savings account, sometimes all or part of it is invested in the stock of the firm. In yet other cases the distribution takes the form of issuing shares to employees on specially favourable terms, or of paying employees who deposit savings with the firm a fixed interest of 3 to 4 per cent., together with a further percentage varying with the annual rate of profit.

All these schemes have a distinguishing element which marks them off from what has been termed "gain-sharing." Under both systems the employees receive a surplus in addition to their ordinary wage. But gain-sharing is in essence a premium on efficiency calculated with reference to the cost of work done or the time spent in doing it, and it is not dependent, as is profit-sharing, on the financial results of the year's working. But it is harder to draw the line between profit-sharing and that some-

¹ A paper read before the Economic Section of the British Association, 1912.

² *Board of Trade Labour Gazette*, July, 1912, p. 274.

thing more than profit-sharing which is coming to be called industrial co-partnership. It is proposed in this article to examine two types of schemes which claim for themselves this distinctive title. And the conclusion tentatively reached is that copartnership differs from profit-sharing in degree rather than in kind. Co-partnership endeavours to make profit-sharing less of an isolated material advantage accruing once a year, and more of a starting-point for ties and interests which shall permanently modify the status of the employee.

Since 1909 there has been in operation in the firm of Lever Bros., Ltd., soap manufacturers, of Port Sunlight, Cheshire, and since 1911, in its associated companies at home and abroad, a scheme¹ which, according to its author, has for its object, not profit-sharing, but co-partnership in prosperity. It depends for its legal validity upon a Trust Deed entitled "The Co-partnership Trust in Lever Bros., Ltd.," and its main features are as follows: Partnership certificates are issued to all servants of the firm from the directors downwards who, being over twenty-five years of age, and having served the firm for not less than five years, have qualified themselves to receive these certificates by compliance with the terms of the co-partnership agreement. The signatories to this, without committing themselves to any sort of pecuniary liability, promise that they "will not waste time, labour, materials, or money in the discharge of their duties, but will loyally and faithfully further the interests of the company." Entry into the scheme is optional. The allocation of the certificates is left to the discretion of the trustees, who are the directors, and in this work they are assisted by an advisory committee of twelve, representing and elected by the separate grades of employees. Any co-partner who is dissatisfied with the decision of the trustees has the right of appeal to the majority shareholder. Once issued the partnership certificates confer a right to dividend, the nature of which is specified in the Trust Deed. After payment of prior charges and of 5 per cent. on the ordinary shares, the surplus of the monies declared by the company to be disposable for dividend is divided *pari passu* at the same rate per cent. between the holders of the ordinary shares and the holders of partnership certificates. By the end of 1911 £275,429 of these certificates had been issued, and the ordinary dividend being 15 per cent., the certificates consequently drew 10 per cent., which

¹ See speech of Sir W. H. Lever, Feb. 25, 1909, printed as supplement to *Progress*, April, 1909 (a monthly magazine of the employees of Lever Bros.).

amounted to £27,542. The dividends are paid to an employees' savings bank account opened for the co-partners individually, and they may be spent, saved, or invested as the latter please. When a co-partner reaches the age of retirement, or before that date is retired by the company through no fault of his own, the partnership certificates are exchanged for preferential certificates yielding 5 per cent. interest, and ranking for dividend after the 5 per cent. paid on the ordinary shares of the company. The preferential certificates lapse on the holder's death, but are continued for the widow unless and until she remarries.

The nature of the partnership certificates and the position of the majority share holder in regard to them are peculiar. They do not in themselves represent money, and they are of no more value than waste paper until a profit over and above 5 per cent. on the ordinary capital has been earned. If the holder voluntarily leaves the business before the appointed age of retirement, and not owing to permanent incapacity caused by ill-health, or if the holder in the opinion of the trustees, subject to an appeal to the majority shareholder, is guilty of a breach of his agreement to render loyal service, then the certificates are cancelled and the rights attaching to them are absolutely extinguished. Thus, neither these partnership certificates, nor the preferential certificates into which they may be ultimately converted, are permanently-owned property, but merely paper of a nominal capital value regulating the distribution of certain monies to their temporary holders. However, these monies, the dividends on the certificates, are the legal and untied property of the recipients. Furthermore, the majority shareholder decides for himself how large the annual issue of certificates shall be. In his own words, "I can give more, I can give less, I can give none." The Trust Deed merely specifies an aggregate limit of £500,000 which cannot be passed without his consent. In practice the scale of issue has been, and for some further time is intended to be, 10 per cent. on the salaries and wages actually earned. Therefore, with the present dividend of 10 per cent. the employee is credited in his savings account with 10 per cent. on 10 per cent., *i.e.*, 1 per cent. on his wages for the current year together with 10 per cent. on the accumulated partnership scrip similarly issued in previous years. There is a maximum of £200 nominal value which any worker earning less than £100 a year may thus accumulate in certificates, and therefore (on a dividend of 10 per cent.) a maximum of £20 which can be paid per annum to his savings account. (There are corresponding maxima at higher

figures for the higher paid workers and officials.) It may be mentioned that the first issue of certificates in 1909 was made retrospective to 1901, so that an issue on the basis of eight, seven, or a lesser number of years was made straight away to those possessing the necessary qualifications.

The scheme is new and must await the test of time, but the possibility that it may find imitators will justify some general comments.

To begin with, the business in which it has been introduced is an exceptionally successful one, and the person mainly responsible for this success is still there as the majority share holder. Sir W. H. Lever argues that capital, like wages, has a right, in the first instance, to a limited remuneration, which he has fixed at 5 per cent., having regard to the rate which the investor who does not actively employ his own capital may reasonably hope to earn. But many old-established companies, as well as many new ones in their early days, earn only 5 per cent., or less, on their ordinary shares. In such concerns co-partnership on this basis and with this justification is impracticable. But, of course, when a business built up by a few individuals is later converted into a public concern, the rate of interest declared on the shares depends considerably upon the terms of conversion. If such a scheme of co-partnership were successfully introduced and consolidated in the private stage, and if at the time of conversion regard were had to the necessity for its maintenance, then it might continue to flourish as part of a normal joint-stock structure in which the remuneration of business talent is secured among the expenses of production and most of the risks are run by shareholders with no greater tie of interest than an appetite for dividends.

Would-be imitators must also have regard to the nature of the soap-making industry. For in modern industry an employee may be specialised in two ways: first, with reference to the skill required in a particular grade of his industry, and secondly, with reference to the practices of the firm by whom he is employed. Specialisation of the latter order is likely to be important in industries occupied by firms which make, and possibly have been pioneers in making, articles of a proprietary order, of which Sunlight soap is a notable example. In such industries employers will gain by having round them for a long period of years workers who know their special ways and have an inkling of their secrets. Conversely, loss of service in a particular firm may mean to the worker a serious diminution in his market value. In such

businesses, therefore, the permanent ties which this kind of co-partnership involves are particularly likely to be of mutual benefit.

Finally, the good faith of the scheme has been warranted by previous experience of the firm's generosity. Coming as an additional endowment in a long series of benefits—model housing, benefit fund, holiday fund, &c.—it was accepted by employees without fear of its being a covert attempt to reduce wages or fetter the wage-earners. Unlike so many profit-sharing schemes, we find it blessed by the secretary of the local trade union, who declared in 1909: "After paying trade union wages to all his staff, after giving concessions in the way of a forty-eight hours' week, . . . this scheme is a thing to be proud of, and Mr. Lever deserves the congratulations and the thanks of every trade unionist in the district."¹

But in less favourable circumstances the merits of the scheme would be its defects. By the device of partnership certificates the employees are given immediately the sense of co-ownership, and the subsequent reinvestment of the accruing dividends in the real stock of the company is altogether voluntary. In other schemes, where a bonus is paid on wages and part is reserved for investment in the company's stock, the worker saves under compulsion, and only draws substantial interest on a capital holding at a later stage of the process. There is a convenience, too, in the fact that the Trust Deed, while suggesting fixity of operation, does not regulate the issue of the certificates themselves but merely the rate of dividend they shall carry in case surplus profits are made. In a bad trade year, when there was no surplus to divide, the certificates could still be issued, although these and those outstanding would receive no dividend for the year in question. In this way the gap between good and bad years would be fortunately bridged without pressure on the company to weaken its commercial position by excessive distribution. If we add to this the fact that a worker forfeits his certificates by striking or by passing to other employment, the strong position of the employer is clearly seen. In ungenerous or imprudent hands this scheme might result in large issues of scrip carrying no market value or legal status, and imposing on the issuers no obligation beyond that of sharing a surplus profit which might be artificially lessened by rearrangements of capitalisation. And in the meantime the workers' hands would have been tied because revolt would entail the forfeiture of the scrip and of the future

¹ Mr. Nelson at the 1st distribution of partnership certificates. July 23, 1909.

benefits expected from it. It is perhaps needless to say that these possibilities are in no wise suggested by the policy of the firm with which this scheme has originated.

The model for the second type of co-partnership, which has now the merit of long approved success, is provided by the South Metropolitan Gas Company. The history of co-partnership in the gas industry divides itself into two periods. The eighteen years from 1889 to 1907 were a time of experiment, during which the late Sir George Livesey, as chairman of the South Metropolitan and director of the neighbouring South Suburban, was pioneering the new system and elaborating its details. By the beginning of 1907, *i.e.*, eighteen years after its inception in the South Metropolitan, co-partnership was confined to five companies—three in London and two in the provinces. Then followed a rapid extension, the impetus to which was given by two addresses of Sir George Livesey at meetings attended by gas engineers and managers in November, 1907,¹ and June, 1908.² Each address was followed by keen and critical discussion, as the result of which a considerable body of expert opinion in the gas industry seems to have been converted to the idea. Of the thirty-six gas companies which are quoted by the Labour Co-partnership Association³ as now practising some form of co-partnership and profit-sharing, practically all have schemes which are based on the models drawn up by Sir George Livesey.

The financial side of the South Metropolitan scheme is based on a sliding scale which applies both to the shareholders' dividend and the co-partners' bonus. At 3s. 1d. the standard price of gas per 1,000 cubic feet, the shareholders' dividend is limited by law to 4 per cent. and the co-partners' bonus is *nil*. For each 1d. reduction in the price of gas the shareholders get a further sum of 2s. 8d. per cent. in dividend and the co-partners $\frac{3}{4}$ per cent. on their wages. That is to say, the bonus instead of varying directly with profits varies with the factor which governs profits, and rises as the price of gas falls. The price being now 2s. 2d., or eleven units below 3s. 1d., the shareholders receive per £100 of stock £4 + £1 9s. 4d. (£5 9s. 4d. in all), and the co-

¹ Sir Geo. Livesey: "Employers and Employed and Co-partnership," a paper read before the Southern District Association of Gas Engineers and Managers, Nov. 14, 1907.

² Sir Geo. Livesey: "Co-partnership," a paper read before the Institution of Gas Engineers, June 16, 1908.

³ 26th Report, 1911, p. 11.

partners a bonus of $\frac{3}{4} \times 11$, or $8\frac{1}{4}$ per cent. Salaried officials and office staff as well as manual workers are eligible for the scheme, and, in point of fact, all the company's servants are co-partners—although it may be necessary temporarily to exclude a worker who has violated the terms of the agreement. It is, to the interest, therefore, of the employees, as well as of the shareholders, that gas should be sold at the lowest practicable price; and the interest of these two parties is thereby reconciled with the interests of the third party, the consumer. The bonus, which is paid once a year, is calculated on the weekly wage, no account being taken of overtime and no deduction being made for absence through sickness up to eight weeks per annum. The bonus, however, is not paid out in cash—it is credited to the co-partner by entry in his pass-book under two heads, one half being carried to trust account for investment in the company's ordinary stock, and the other half being retained on savings account at 3 per cent. interest, withdrawable only under special circumstances. Co-partners are forbidden to sell or pledge their stock, and a breach of this rule results in expulsion from the scheme. But the past bonuses can in no circumstances be forfeited, the savings and stock are the individual and absolute property of the co-partner. If he leaves the company or is discharged he has the choice of retaining his stock or of taking with him the full cash equivalent.

Variability of bonus, compulsory saving, and part investment in the company's stock characterise also the co-partnership schemes of the other companies. Companies with fixed maximum dividends have to arrive at their standard price differently. Thus, in the Liverpool United Gas Light Company, the latest big adherent to co-partnership, this price has been fixed at 2s. 8d., the price of gas eight years ago, and the price of gas being now 2s. 1d., the scheme has been started with the respectable bonus of $\frac{3}{4} \times 7$, or $5\frac{1}{4}$ per cent. In some schemes all the bonus up to a certain sum, say £20, is reserved for investment; in others the withdrawable half is freely withdrawable. The South Metropolitan has been so prominently the pioneer company that the merits of co-partnership in the gas industry may be best appraised by reference to the experience of this company.

The financial advantages to the employees are evident. In most of the co-partnership gas companies the bonus is in the neighbourhood of 5 per cent. on wages. In the South Metropolitan, where the present rate is $8\frac{1}{4}$ per cent., over half a million has been paid in bonus since 1889, and the employees now hold over

£300,000 of the company's ordinary stock. Has the bonus been at the expense of wages? There are no figures or facts which would suggest this. Though there is no formal "union rate," the wages paid by the London companies practising co-partnership have been at least equal to those of other companies. The South Metropolitan Company gives its average for 1907 at 33s. per week; and this figure, which includes a number of boys under twenty-one, does not include any of the salaried staff.

The attempt of the Gas-workers Union to defeat the South Metropolitan scheme in 1889, and the threat that they would organise a further strike, of which no notice would be given, led to the insertion in the co-partnership agreement of a clause whereby the men bound themselves not to join the union, but many years ago the prohibition was withdrawn, and has never existed in the case of the other companies.

The retention of the bonus for deposit and stock prevents unthriftiness in the use of it. It cannot, like schemes of deferred benefits which are dependent on continuation in the service of the same company, restrict the employees' real freedom. On the contrary, the possession of property makes the man, as an individual, more independent. In one direction, clearly, his mobility is increased. Not infrequently cases have occurred where men have gone out to the Colonies, using their savings for the purchase of land.

It is not to be denied, however, that co-partnership introduces the worker in some degree to financial uncertainty and risk. Uncertainty attaches to the realisation of the bonus. The workers may respond to the scheme by extra zeal and devotion, but the bonus which is dependent on the price of gas may not advance correspondingly. It is, indeed, impossible to prove formally that the introduction of co-partnership has caused a progressive reduction in labour costs, and this in turn a progressive decrease in the price of gas, but Sir George Livesey contended before experts that the notable reduction in labour costs coincident with the progress of the scheme in the South Metropolitan and South Suburban companies, although due in great measure to the introduction of labour-saving machinery, was in part due also to the greater efforts and economies made by the men. The saving in labour costs, he said, more than balanced the bonus paid out. "It is not true co-partnership if it does not benefit both employed and employer financially, for much of its success must be due to the employer, who not only initiates it, but on whom mainly depends its proper and successful working. It is, therefore, quite

fair that he should benefit equally with his workmen, and my experience is that they are content it should be so."¹

It is to be expected from the nature and position of the gas industry that increased efficiency of production will manifest itself in cheaper price. For, in the first place, the supply of gas is a distributive monopoly. Electric current, which the South Metropolitan Company does not supply, is, indeed, an increasingly formidable competitor; but, nevertheless, the gas industry is not exposed to such violent fluctuations of profitableness as, for example, are the jute and shipbuilding trades. In the second place, by the regulations already described, shareholders can only reap additional profits in proportion as prices are reduced. In the third place, the oscillations of demand are not acute.

It is not possible, however, to isolate one contributory cause in the cost of production and to say, "in this or that year the price of gas fell so much as the result of more efficient labour, which was itself the result of co-partnership. The facts as regards the South Metropolitan for the twenty-two years from 1889 to 1911 are these: from 1893, by which date the scheme was firmly established, the price fell 1*d.* a year down to 1900. In 1901, owing to a big rise in the cost of raw materials, the price rose 7*d.* to 2*s.* 8*d.* In 1902 the price dropped again to 2*s.* 3*d.*, and for the last two years it has been 2*s.* 2*d.* Now it is to be noted that in the years from 1893 to 1900, when the scheme was on its trial, costs and prices were falling in non-co-partnership as well as in co-partnership concerns. The scheme was, therefore, fortunate in its time of probation. If the present rise in general prices extends appreciably to the raw materials of the gas industry, it is probable that the price of the products, gas itself, as well as its highly-important by-products, will rise, or, at any rate, not decline further. Will this be fatal to co-partnership, especially to those companies which have but recently adopted it? The experience of the South Metropolitan is that on two occasions, 1892 and 1901, sudden and serious reductions of bonus were accepted without friction. The men recognised, said Sir George Livesey, the perfect fairness of consumers, shareholders, and employees suffering together. They accepted as an essential part of co-partnership the idea that the co-partners—to the extent not of their wages but of their bonus—should share in the risks of profit and loss along with the other parties. However, it must be recorded that in 1901, when the rise in price should have extinguished the bonus altogether, the company took advantage of the

¹ Livesey: "Employers and Employed and Co-partnership," p. 19.

critical juncture to revise the bonus scale by bringing it into line with the scale applying to dividends, with the result that the bonus was only reduced from 9 per cent. to $3\frac{3}{4}$ per cent.; instead of from 9 per cent. to *nil*. The lesson seems to be that the system will stand moderate fluctuations, and that a rise of price sufficient to extinguish the bonus can, if necessary, be met by a revision of the sliding scale.

The second element of risk to which the workers are introduced resides in the possible fluctuations of the stock in which their bonus is invested. Here, again, the position of the gas industry is favourable. Gas stocks in general are not the object of great speculation. The recent downward fluctuations in the preference stock of the United States Steel Corporation have militated against its scheme of privileged investment by employees, and a similar movement in the stocks of gas companies would undoubtedly inflict a strain on the plan of compulsory investment.

The general, as apart from the financial, merits of the scheme may now be examined. The trade unions, in London and Liverpool particularly, have opposed co-partnership on the ground that it strikes at the solidarity of labour. In one sense this allegation is true. Co-partnership as an engine of social peace strikes, and is meant to strike, at a social ideal based on the war of classes with intervals of armed neutrality. In the first place, whilst a man is working under a co-partnership agreement it is illegal for him to strike. For this agreement is also his contract of service running for a period of three or six or twelve months, and breach of contract by employees in gas and water undertakings renders them liable to criminal prosecution under the Conspiracy and Property Act of 1875, apart from possible procedure under the common law. This secures the company and its customers against a sudden strike by the workmen, and it also secures the workmen from external pressure to come out in sympathy. The agreement, however, binds the masters as well as the men, who, instead of being liable to the usual week's notice, are guaranteed continuous employment for a term of months.

Apart from this negative feature, the positive ties of co-partnership, culminating in the fact of part ownership, is calculated to discourage aggressive action which may damage the company's prosperity. But is not the workman thereby bartering his freedom for money and the things which money buys, bartering that freedom of organised action which our industrial

democracy has struggled for a century to maintain? If the wage agreement and bonus provisions were the beginning and end of the scheme this risk would indeed be serious, but controlling these things or connected with them are certain institutions for collective action.

The management of the scheme rests with a co-partnership committee, consisting of the chairman of the board of directors and twenty-six members elected by the board and twenty-seven members elected by ballot by the co-partners in proportion to the numbers in each station. The three trustees under the scheme are one director, one officer, and one co-partner workman, in whose names the investments are made annually in the company's stock. One of the two auditors, whose duty it is to compare the co-partners' pass-books with the general account, is elected by the employees. The committee meets about once a quarter. In addition to its formal business the committee acts as a channel of communication between the management and the men. Grievances are ventilated and suggestions are made for improvement in the sanitary and other conditions of work, though general discussion on such topics as wages and the cost of living would probably be ruled out of order. It was the co-partnership committee which in 1897 settled and presented to the workers for acceptance the rules of the accident fund, a notable feature in which is the jury system dating back to 1892. Juries of twelve workmen investigate the causes of each accident and return a verdict, not hesitating to say whether any blame attaches to any official or workman, or whether the plant, machinery, or means of protection were defective (Rules xxii., 6). Furthermore, the co-partnership committee watches certain cases belonging to the superannuation fund, and its most recent task has been provided by the National Insurance Act. The rules for the approved society which has been formed among the company's employees have been drawn up by the co-partnership committee, assisted by additional representatives of the employees co-opted for the purpose. Similar work is doubtless done in other firms by organisation which is not styled co-partnership, but it is necessary to mention its existence because the success of co-partnership on its distinctive, financial side has been assisted by the democratic machinery which works in it and about it.

The co-partnership committee is the natural accompaniment of the bonus scheme, and is to be found in most, if not all, of the gas companies practising co-partnership. But there is one further feature peculiar to the South Metropolitan and South Suburban

Companies, namely, the representation of the workers on the board of directors. The former company has had two workmen directors since 1898, and one clerk director since 1901; the latter two workmen directors since 1905. The present employee-directors in the South Metropolitan are a foreman of the gas-fitters, an ordinary coke-filler, and a chief clerk in a branch works. The workmen and office staff vote separately, so that the elections are genuinely representative of each class. "The experiment," said Sir George Livesey in 1908, "has given unalloyed satisfaction to directors, officials, and workmen."¹ Now no one requires to be convinced of the theoretical advantages to both masters and men of having the workers' point of view fairly and freely represented on the board of management. The need for it grows each day as the unit of production becomes bigger and the more personal relation of earlier days gives way to the soullessness of the joint-stock company. What is wanted is proof of its practicability, and this the South Metropolitan and South Suburban Companies, under the influence of a strong personality, have given to the world.

We have already observed that the interest of consumers is formally safeguarded by the provision that an increase of bonus is contingent upon a reduction in the price of gas. When the company serves a working-class district, a further incidental advantage arises from co-partnership. About a third of the South Metropolitan's trade is with the working classes. Its workmen, who largely live in the area thus supplied, are a link between the company and its consumers. They understand the wants of working-class families, hear their complaints and suggestions, and communicate these to the management. In return they recommend to their neighbours new or improved uses of gas. Such zeal is perhaps carried to excess when, as we are told² of one co-partnership company, the men threatened to boycott the tobacco shop of a certain town councillor who was rash enough to propose the substitution of electricity for gas in the public lighting.

The growth of municipal enterprise raises the question as to whether it is desirable or possible to introduce co-partnership among municipal employees. Recent experience has shown that municipalities as well as companies may have to face labour trouble in the acute form of strikes. It is doubtless desirable that the municipality should lead the way in model conditions of employment; but if its employees by the direct pressure of a

¹ Livesey: "Copartnership," p. 11.

² Livesey: "Copartnership," p. 29.

strike or the indirect pressure of their votes thereby extort wages very considerably higher than those prevailing in the district for a similar class of work, there is no clear gain to the public or even to the working class as a whole. For either the rates or the price of the municipal services will be raised and some of the burden will be borne by other working men. But though municipal co-partnership may be desirable it is less easy of application. For the municipality can fall back upon the ratepayer; and a scheme of co-partnership based on municipal profit or municipal charges might degenerate into a form of indirect taxation, while further difficulties would arise over the investment of bonus in municipal stock. The one municipality which is sometimes said to practise profit-sharing, namely, the town of Stafford, in its gas and electricity departments, has, in fact, a scheme of gain-sharing only. For the bonus, which is all paid out in cash, does not vary with the profits of the departments, but with the amount by which the labour cost of manufacturing and distributing gas falls below a figure decided by the corporation to be reasonable.

The lesson of these successful experiments in the gas industry is, in part, the lesson which lies hid in the revolutionary Syndicalism of modern France. Both are a protest against the unsatisfactory status of the wage-earner under capitalism. Both aim at restoring that closeness of feeling between the worker and his work out of which enthusiasm and passion are born. The Syndicalist dreams of an industrial society controlled by the workers of each trade, and believes that his zeal to smash the existing *régime* will certify his ability to dispense with the stupidity of the employer and the tyranny of the State in the *régime* which is to follow.

Co-partnership is more modest—it can tolerate the continuance of that hard-pressed, but by no means dumbly-suffering creature, the employer; but we may doubt whether it can profit by the attention of politicians. The increase of public interest in co-partnership has been ominously accompanied in the present year by a Bill¹ intended to smooth its way by legislation. If we have correctly analysed the developments in the gas industry, the success of co-partnership depends on just those elements which legislation is ill-fitted to touch. For here it has been a gradual growth, fostered by a generous enthusiast, carefully adjusted to the favouring conditions of a particular industry, and dependent for all its success on the efforts of those whom it primarily concerns.

C. R. FAY

¹ [Bill 238], 1912.

SOME RECENT DEVELOPMENTS OF POOR RELIEF.

A FEW years ago it was possible to ascertain by a glance at the statistics of the Local Government Board the exact position of the country in regard to the public relief of the poor, and to answer with certainty the vital question as to what proportion of the poorer population lives by its labour, and what proportion lives by some sort of State subsidy. There was then practically no form of public relief which was not included in those statistics, and the greatest importance was attached to their accurate keeping in order that the nation might, at any time, take stock of the position by the light of evidence which was both clear and comprehensive. But this is no longer possible. The official statistics of pauperism now cover only a portion of the ground. The movement known as "the break-up of the Poor Law" has set in with increasing rapidity within the last few years, and to-day some four or five different bodies administer public relief where there was one before. These bodies work almost entirely independently of one another and overlap in many directions. Their finance and accounts are, of course, quite separate, and no attempt is made to bring the relief that they administer into a common account, although in fact they distribute as much relief as the Poor Law itself. We are therefore in the position that we have at present two Poor Laws, the one of which is guided by certain principles based upon past experience, and keeps careful statistics both of its expenditure and of the number of people dealt with, whilst the other is guided by no such principles and its statistics are confused with those of other branches of administration.

The principal Acts by means of which this "break-up" has been effected are the Unemployed Workmen Act of 1905, the Provision of Meals Act of 1906, the Old Age Pension Act of 1908, and the (Education) Administrative Provisions Act of 1907. An appreciable amount of relief is also administered by Borough Councils under various Acts dealing with public health. The Home Office has been making excursions in the same direction through its Reformatory and Industrial Schools, and the late

Home Secretary even proposed to give to the police the duty of seeing to the clothing of ragged children in London, as is already done in several important provincial towns. One effect of this break-up of the Poor Law has been that the total public expenditure for the relief of the poor has in the last twenty-five years risen from about eight millions to approximately thirty millions. The last Annual Report of the Local Government Board shows that Poor Law expenditure was fifteen millions, whilst about thirteen millions was spent under the Old Age Pension Act, and £183,500 under the Unemployed Workmen Act. To this must be added an, at present, unascertained sum expended under the Provision of Meals Act, whilst a fresh movement, of which it is impossible to foresee the ultimate results, has just been started for the provision of medical relief to school-children under the (Education) Administrative Provisions Act of 1907.

Meanwhile the whole tone of public opinion upon questions of poor relief appears to have changed. At one time it favoured thrift and self-reliance, and self-support was held to be more creditable than dependence upon public funds. Now all this is altered. Old age pensioners, many at least of whom might have provided for their own old age by reasonable prudence in their earlier years, are designated without distinction as the "veterans of labour." Since the removal of the pauper disqualification a good many people who have been in receipt of parochial relief for years have become these veterans of labour. The present writer well remembers asking one of them, who is now qualified for an old age pension, how he earned his living. His reply was "in the workhouse," and many chronic paupers are qualifying similarly for an old age pension. The able-bodied unemployed are now promised "honourable" maintenance. We are asked to abolish the last "stigma" of the Poor Law by doing away with the word "pauper." The electoral disqualification has been removed in the case of outdoor medical relief. Schemes of Poor Law reform are in the air, which all tend to make the receipt of relief more honourable and more acceptable.

The object of this paper is to examine the relations of these various forms of public relief to one another, and to watch their general tendency. We will take them in order under their several heads :

THE UNEMPLOYED WORKMEN ACT, 1905.

This Act was the direct outcome of Mr. Chamberlain's circular of 1886, by which local bodies were instructed to give work, outside the Poor Law, to the better class of workman "ordinarily

in work and temporarily unemployed." This circular, intended for a special occasion, was issued again and again by his successors at the Local Government Board, and for twenty years vestries and other local bodies were occupied in trying to make work for the unemployed. It is of special importance because it made the first breach in the unity of the Poor Law. The work given was quite inadequate, often only amounting to one or two days a week, and it was found to interfere with the work of those ordinarily employed by the local authorities. Meanwhile a generation was brought up to look to the vestries for employment-relief, and crowds gathered, winter after winter, round the offices of the local authorities, demanding it. Ultimately the position became intolerable, and in 1905 the Unemployed Workmen Act was passed as an attempt to regularise this relief, and to liberate the local authorities from the pressure. It has undoubtedly had this last effect, but it has only transferred the difficulty elsewhere. The Central Unemployed Body has since 1905 issued five reports, and these reports show :

(1) that the vast majority of those applying have been casual labourers and certainly not those for whom the Act was intended ;

(2) that the work provided has done nothing to permanently improve the position of those who have received it, and that the same people apply year after year ;

(3) that it has been impossible to provide work for more than a very small proportion of those who apply.

Though, by the Unemployed Workmen Act, the period for which work is given has been extended from the odd days previously given to a maximum period of sixteen weeks, it is none the less a form of casual employment which the casual labourer comes to look upon as part of his normal means of subsistence. The last Annual Report of the Central Body shows that there were 51·3 per cent. of recurrent applications. The same people are also being assisted at other times, in a large proportion of cases, by the Poor Law or their children are being fed by the Education Authority. In a return for a single district which was presented to the Royal Commission on the Poor Law it was shown that of 437 cases assisted by the Distress Committee, 234 were already known to the Guardians, and 81 again resorted to the Poor Law. These figures may be taken as fairly typical of the conditions prevailing elsewhere. It was pointed out when the Unemployed Workmen Act was under consideration that its effect would probably be to increase and perpetuate the evils of casual labour. In fact, it has established twenty-three schools of casual labour

in London and nearly 150 in the whole country. When the Act was passed the hope was held out that the work given would be provided by voluntary subscription. Mr. Long, addressing a meeting at the Local Government Board shortly before the Act was passed, expressly stated that under no circumstances could a Government grant be made for the purpose. But very soon, as is always the case under similar conditions, voluntaryism was driven from the field, and a year or two later Mr. Burns had to promise a grant of £200,000. Again, the Act, like Mr. Chamberlain's circular, was intended for times of exceptional distress. It has now become the normal procedure of the winter months.

THE PROVISION OF MEALS ACT, 1906.

Here again the hope was held out that the meals would be provided by voluntary subscription, and much opposition was disarmed thereby; but permissive power was given to charge them upon the rates. For two years the L.C.C., which has a small and precarious "Municipal Reform" majority, relied upon voluntary associations such as the "London School Dinners Association," but in December, 1908, Socialist pressure became too strong, and the cost was thrown upon the rates. Since then the average number of children fed weekly has gone up from 29,000 to 12,000, and the number of meals provided from 74,000 to 203,000.¹ There is now a strong agitation to feed the children during the school holidays. But, further, the hope was held out that it would be possible to recover a large part of the cost from neglecting parents. The expenditure last year was £88,000, and the amount recovered was £510. This is of special interest, because now there are large schemes of Poor Law reform in the air which are based upon the principle of "charge and recovery." We may form some opinion from these figures as to what the prospects would be if they were carried into effect.

(EDUCATION) ADMINISTRATIVE PROVISIONS ACT, 1907.

This Act provided, for the first time, for the medical inspection of all children in public elementary schools. Previously only abnormal children had been so inspected. An immediate result was the increase of the medical staff of the Education Committee from twenty-seven full or part time doctors, and thirty-two school nurses, to one hundred and thirteen doctors and eighty-nine nurses. But the Act gives the power "to make arrange-

¹ *Ann. Report of L.C.C., 1910, Vol. iv., p. 38.*

ments for attending to the health and physical condition of the children," and inspection inevitably led at once to the provision of treatment for children found to be physically ailing. The precedents of the Unemployed Workmen Act and of the Provision of Meals Act have been closely followed, in that the L.C.C. are attempting in the first instance to provide treatment through voluntary charity, and have entered into arrangements with the great hospitals upon the basis of a contribution by the public body in respect of the children treated. But there is already strong pressure for the establishment of rate-supported school clinics, and it remains to be seen how long this pressure can be resisted. Praiseworthy attempts are being made to throw the responsibility for this treatment upon the parents and to recover part of the cost, but the ultimate responsibility for ensuring that the children receive treatment rests with the public authority, whether the parents pay or whether they do not. The School Care Committees bear the chief burden of the work—"the responsibility for securing that appropriate action is taken in every case devolves upon them."¹ They have to classify the cases according to their nature, and to assess the parents' payments under the Act of 1909. "Considerable difficulties have arisen in connection with this part of the work, and steps are being taken to introduce a method of assessment less complicated than that originally introduced."² This method, which has now been decided on, provides for a maximum payment of 1s. and a minimum of 1d. In 1910, though the scheme had hardly yet begun, the cost of this medical inspection and treatment amounted to £26,880, whilst the amount recovered was £329. There are many who prophesy that the minimum charge of 1d. will soon become the maximum. It is significant, moreover, that already "arrangements are being made for remitting the charge in necessitous cases,"³ whilst in another place we find that "no hard and fast rule for determining necessity has been adopted by the Council."⁴ The Council are thus already face to face with the old difficulty of a test. But as yet they hardly appear conscious that there is such a difficulty, either in regard to the means of the parents or to the actual needs of the child. "There is" (they say) "no absolute standard of what is, and what is not, healthy nutrition. *Necessitous children are not necessarily ill-nourished at the time of application for aid, though they would become so if relief were withheld.*"⁵

¹ *Ann. Report of L.C.C.*, 1910. Vol. iv., p. 43.

² *Ibid.*, p. 48.

⁴ *Ibid.*, p. 35.

² *Ibid.*, p. 44.

⁵ *Ibid.*, p. 35.

The difficulty of collecting the small sums required under the assessment is enormous. A story is told of a collector who climbed twelvetimes to the top floor of some model dwellings to collect one penny, and sooner than attempt it a thirteenth time, paid it himself. It appears from all this that we are within sight of free medical treatment in all cases where the parents are unable or unwilling to pay.

It is estimated that some 30,000 children were satisfactorily treated under the above arrangements in 1910. The parents are not altogether satisfied, as they consider in some cases that they are deprived of the free treatment at hospitals to which they have been accustomed, and they resent the X-ray treatment for ring-worm and the provision of spectacles, which they believe prejudice their children's chances of getting work. A large extension of the system is foreshadowed in regard to dental treatment. "It is evident that the needs of London will have to be met by special provision for the work."¹ In regard to medical treatment generally there appears to be no system of co-operation with the Poor Law, and yet in 1911 no less than 111,000 outdoor medical orders were issued in London, many of which were undoubtedly for children of school age. Is it not time that the matter should be considered from this point of view?

The Education Officer commences his report thus:—"Formerly (he says) education was in the main confined to (1) the growth of character; (2) the growth of the mind. Now education looks increasingly at the social problems that present themselves for solution in the case of the individual child, the problem of physical deterioration, of underfeeding, of impoverished homes and unsuitable employment. The State has come to see that it is not enough to impart knowledge, but that it must also see that the child is capable of assimilating that knowledge and that his environment is such that it will not entirely undo the effect of the school training." Truly this is a startling definition of the scope of education as coming from a body such as the L.C.C.; the new development is referred to euphemistically as the "widening" of education; in fact, it may easily be made to cover the entire State maintenance of children.

THE OLD AGE PENSION ACT, 1908, AND ITS EFFECT UPON THE POOR LAW.

The Old Age Pension Act came into force on January 1st, 1909, and the pauper disqualification was removed on January 1st,

¹ *Ann. Report of L.C.C.*, Vol. iv., p. 48.

1911. The Local Government Board have published a return (Cd. 5612) showing the number of paupers transferred to the pension list in the month of January, 1911. The transfer was practically complete by the end of the third week. The table on p. 549 opposite shows the number of indoor and outdoor paupers remaining in each London Union on January 21st, 1911, and the number of these who had been transferred to the pension list. This will enable us to form some opinion as to the situation on that date.

The table shows that 1,168 indoor and 10,265 outdoor paupers were so transferred, whilst there still remained 80,822 indoor paupers and 32,825 outdoor; that is to say, practically the whole of the indoor paupers and two-thirds of the outdoor. Still the official figures of outdoor pauperism naturally showed at once a large decrease, though this decrease loses its significance because we know that these 11,000 paupers have only been transferred to another form of relief. But a fresh tendency at once revealed itself. It is pointed out in the half-yearly return of pauperism for January 1st, 1911, that already there were 3,554 more people under 70 in receipt of relief than on January 1st, 1910, and this tendency continues. A recent return for the Lambeth Union shows that at the date of the return there were about 200 more outdoor poor under 70 than at the corresponding period of the previous year, and this was ascribed primarily to the operation of the Old Age Pension Act. Nor is it difficult to understand the reason: Guardians who are prone to give out-relief, finding that the people over 70 have been taken off the rates, are by no means loth to fill their places with younger people. Moreover, there is always now the almost irresistible plea that people should be kept out of the workhouse for a year or two until the Old Age Pension becomes due.

Truly in all this we see the irony of fate. We were told that old age pensions would empty our workhouses and save an enormous expenditure upon Poor Law relief. Mr. Charles Booth assured us that it would be possible to do away with out-relief altogether. We were told, moreover, that the grant of a pension at 70 would be a strong incentive to self-maintenance until that age was reached; and now we find our workhouses as full as ever, whilst the places of those transferred from outdoor relief to the pension lists are fast being filled by those under 70. So far from the pension being an inducement to self-maintenance in earlier years, the fact that a pension is due shortly is made a reason for asking for out-relief in the interim. And so relief is made

STATEMENT OF THE NUMBER OF PERSONS IN RECEIPT OF RELIEF
ON SATURDAY, JANUARY 21ST, 1911, AND THE NUMBER OF
PAUPERS TRANSFERRED TO THE PENSION LIST DURING
JANUARY.

• Union or Parish.	Population (Census 1911).	Paupers not Transferred		Paupers Transferred	
		Indoor.	Outdoor.	Indoor.	Outdoor.
<i>West District—</i>					
Paddington	143,976	1,995	378	15	131
Kensington	176,628	2,631	173	48	114
Hammersmith	112,239	1,348	848	10	236
Fulham	137,289	1,677	316	41	109
Chelsea	73,842	1,630	136	13	134
St. George's	128,256	2,705	488	35	208
Westminster... ..	33,081	693	88	5	21
Total for West District ..	<u>805,311</u>	<u>12,379</u>	<u>2,427</u>	<u>167</u>	<u>953</u>
<i>North District—</i>					
St. Marylebone	133,301	3,446	316	36	157
Hampstead	81,942	570	128	6	54
St. Pancras	235,317	4,387	1,336	53	408
Islington... ..	334,991	5,111	4,913	92	1,286
Hackney... ..	270,513	8,687	1,994	39	587
Total for North District ...	<u>1,056,070</u>	<u>17,201</u>	<u>8,587</u>	<u>226</u>	<u>2,292</u>
<i>Central District—</i>					
St. Giles and St. George ...	31,436	965	111	11	45
Strand	21,674	1,293	96	14	38
Holborn	128,691	3,300	1,222	40	463
City of London	27,664	836	130	4	55
Total for Central District ..	<u>209,465</u>	<u>6,894</u>	<u>1,559</u>	<u>69</u>	<u>601</u>
<i>East District—</i>					
Shoreditch	118,637	2,717	680	27	237
Bethnal Green	129,680	2,682	198	59	149
Whitechapel	78,768	1,722	22	13	1
St. George-in-the-East ...	49,068	1,231	18	13	0
Stepney	57,937	1,833	146	29	84
Mile End Old Town	112,827	1,792	794	30	309
Poplar Borough	168,822	4,169	3,633	33	984
Total for East District ...	<u>715,739</u>	<u>16,146</u>	<u>5,491</u>	<u>205</u>	<u>1,764</u>
<i>South District—</i>					
Southwark	206,180	5,281	2,030	52	499
Bermondsey	130,760	3,189	2,048	21	632
Lambeth	301,895	4,330	1,888	77	787
Wandsworth	400,941	4,778	1,312	58	616
Camberwell	259,339	4,093	3,672	21	1,086
Greenwich	185,034	3,132	1,468	47	556
Lewisham	134,721	1,434	1,325	11	322
Woolwich	131,086	1,665	1,018	12	197
Total for South District ...	<u>1,749,958</u>	<u>27,902</u>	<u>14,671</u>	<u>309</u>	<u>4,655</u>
Total for London	<u>4,536,541</u>	<u>80,822</u>	<u>32,825</u>	<u>1,168</u>	<u>10,285</u>

to breed relief. But a further irony of fate remains to be recorded. When the Old Age Pension Act was passed the greatest stress was laid upon the condition that old age pensioners or the "veterans of labour" should be entirely dissociated from all contact with the Poor Law. So much was this the case that the officers of excise were called upon to undertake the administration, and the very name of the relieving officer was anathema. But, in fact, a very large proportion of the pensioners continue to receive Poor Law relief, in many cases simultaneously with the receipt of their old age pension. In at least one London Union careful statistics have been kept since the Old Age Pension Act came into operation, with the following result :—"240 pensioners have received relief from the Guardians, and of this number 136 came into the workhouse or infirmary, twenty-nine received both indoor and outdoor medical relief, and seventy-five outdoor medical relief only. Many of these cases were relieved for unbroken periods, varying from six to twelve months. Several have been continuously receiving relief since taking their pension. In all these cases, except in six, when the pensioners came into the workhouse, they continued to receive their pension. One pensioner who had been admitted to the infirmary on five occasions stated that one reason for wishing to be admitted was in order to save money against his discharge. Some pensioners allowed their pensions to accumulate, whilst others allowed a relative or friend to draw the pension. Notwithstanding the Chancellor's statement that Guardians could get an officer nominated to receive the pension, every obstacle has been placed in their way by the Pension Authority who apparently look upon the Guardians as a hostile authority. This lack of co-operation is most unfortunate. In one case a pensioner was admitted to the infirmary suffering from senile debility and in a verminous condition. The Relieving Officer found that he had been living with a woman much younger than himself, who retained the pension book for her use. He reported the case to the Pension Officer, who said that it was "no business of his." It is clear from reports received from all over the country that the conditions prevailing in this Union are by no means exceptional.

A return of the L.C.C. for the first quarter of 1911 showed that there were 60,500 pensioners in London at that date. This represents at a moderate estimate an addition of half a million to the cost of outdoor relief in the metropolis. The total out-relief for all classes in 1910 was only £307,231.

CERTAIN OTHER FORMS OF RELIEF OUTSIDE THE POOR LAW.

But there still remains an appreciable amount of public relief administered by bodies other than Boards of Guardians. For example, many Borough Councils provide sanatorium relief. Some outside London have their own sanatoria. The London County Council, in addition to the outdoor relief and medical treatment of school-children, maintain a large number of defective children in residential homes, where they are provided with board and lodging, of the cost of which the parents bear a very small proportion. Again, they spend a large sum—last year £128,000—in scholarships, or maintenance allowance for the children of poor parents, which cannot be ignored when we are considering the question of public expenditure upon relief. Neither can we leave out of consideration the Insurance Act, which came into operation in July, and which to the extent of “ninepence for fourpence” is admittedly eleemosynary. It is clear that this measure, whatever its advantages, must result in a large subsidy to the wages of the working classes.

SUMMARY OF THE POSITION IN REGARD TO LONDON.

On January 1st, 1912, the total number of paupers in London, excluding lunatics and casuals, was 109,481. But to this 109,481 we must now add (say) 60,000 old age pensioners, an indefinite number of able-bodied men receiving relief on that day under the Unemployed Workmen Act, a weekly average of 40,000 children receiving meals under the Provision of Meals Act, an indefinite number of children receiving medical relief under the Education Administrative Provisions Act, and an indefinite number of people receiving public relief outside the Poor Law in other ways above indicated. These figures have now to be collected from some half-a-dozen different reports.

We have seen that as the result of the removal of the pauper disqualification there was a large transfer of outdoor paupers to the pension lists and corresponding reduction of pauperism; but that the present tendency is to fill the places of those transferred to the pension list with outdoor paupers under 70. This tendency became especially marked in the third week of the Lady Day quarter of this year. If it continues we shall before long have as many outdoor paupers as before the disqualification was removed, and the old age pensioners and others into the bargain. It has been shown also that many pensioners are receiving Poor Law relief as well. In one Union it is reported that pensioners have

discovered that they can supplement their pensions, which are notoriously 'inadequate, by continuous outdoor medical relief and nourishment, and that they do so systematically. Many others enter Poor Law infirmaries and receive their pensions as well, so that ratepayers and taxpayers pay for them twice over. Again, last year nearly 5,000 able-bodied men received jobs of work from the Central Unemployed Body. But we have to consider the effect of the Act not only upon those who received work, but also upon those who were kept waiting round the offices of the Distress Committees, and we find that there were 25,268 applications, of which 51 per cent. were recurrent, that is to say, that the applicants had applied in former years. Only about one in five get work, and that of a casual nature. It is plain that many of them gravitate between Distress Committees and the Poor Law and various charities, whilst their children are fed at the schools. The general public is probably unaware of the wretched and precarious existence that is led by these unhappy victims of State bounty. Jobs of work, school dinners and the like, are in reality subsidies to the casual labourer who is able to produce children much faster than the State can maintain them.

And so we have in London at the present time a lamentable confusion of relief. So far from one form of relief being the substitute for another, relief leads to more relief, and there is constant and continuous increase in all directions. There is little or no co-operation between the administering bodies and no reasoned plan for dealing with the problem of poverty. Everything is piecemeal and chaotic. And as the result we have an ever-growing proletariat population, chiefly composed of casual labourers, who are maintained in turn (and sometimes simultaneously) by Poor Law Guardians, Distress Committees, Education and Health Authorities, and other public bodies. By the admission of everybody casual labour is one of the most crying evils of the day, and we meet it by establishing centres of casual labour all over the country. What is worst of all, perhaps, is that we are fast losing the power of taking stock of our position, because we bury public relief in the statistics of various branches of public administration and disguise it as education, public health, or the reward of industry.

We shall never get back to a healthier position until the public realise that the problem of public relief is the most difficult and critical that any nation has to deal with, and is one which requires the undivided and concentrated attention of the community as a separate branch of administration. We have had

many lessons in the past and the question has engaged the attention of our best thinkers since the passing of the Act of Elizabeth. It is said now that the conditions have changed, and it is quite true that industry is far more complex than it was a hundred years ago. But the underlying problem is one of human nature, which remains the same as it has always been, and the magnitude and complexity of modern industrialism render the position far more dangerous than it has ever been before.

W. A. BAILWARD

THE DEPRECIATION OF GOVERNMENT SECURITIES IN GERMANY.

I.

"I HAVE often been astonished, considering that we are divided from you by a slender dyke of about twenty-four miles, and that the mutual intercourse between the two countries has lately been very great, to find how little you seem to know of us." So wrote Edmund Burke in his *Reflections on the Revolution in France* (1790), and the same words might be used with almost equal justification at the present day.

The remarkable depreciation of Government securities which has recently taken place in Germany, England, and other countries, affords a fresh illustration of the truth of Burke's dictum. For a time each nation looked upon this phenomenon as peculiar to its own experience, and made it the theme of melancholy observations on the decline of its national credit. We find this attitude equally in Germany and England. A striking instance occurs in the *City Notes* of the *ECONOMIC JOURNAL* (1910, p. 141): "The credit of the English Government, owing to the political activity of Socialists and the power they have gained in the councils of one, if not both, of our great political parties, is no longer what it was. The reports of the transfer of investment money from English to foreign securities are probably exaggerated, but they come from too many quarters to be disregarded. . . . Nothing else apparently can account sufficiently for the drop in Consols in the last four years. There could be no stronger argument for looking carefully into our national finance, which must be damaged by the building of the Budget—the postponement of necessary business regarding expenditure and taxation to political wrangling."

In Germany we have done more than lament, we have for a number of years tried to devise some means of counteracting this downward tendency of Government securities. Prussian Ministers of Finance protest that their State securities are entitled to rank as first-class credit, that the decline in prices is wholly

unwarranted, and they cite pathetic stories of the suffering inflicted thereby on widows and orphans. Twice the Prussian Government has proposed to prevent further fluctuations by compelling the savings banks to invest a large portion of their funds in State securities. A scheme introduced by the Government in 1905 failed to secure a majority in the *Landtag*, and a fresh proposal brought up in 1912 will probably meet with a similar fate.

This policy naturally met with criticism. It was doubtful whether the measure would achieve any results, and it was at least questionable whether the obligations thus placed on savings banks were at all consonant with their proper functions. But the real objection to the scheme is more fundamental; it is that before we devise remedies at all, we must know whether the decline in the price of Government securities is an event to be met with palliatives of the kind. The *City Note* which we have already quoted starts from the assumption that the decline in the price of Consols is a direct consequence of Socialistic legislation. On the other hand, Prussian Ministers boast, with comparative justification, of the high degree of credit to which their securities are entitled, a circumstance which makes the depreciation as unintelligible as it is unwelcome.

In contrast to the *City Note*, we find the anonymous "Stockbroker" of the *ECONOMIC JOURNAL* (1912, p. 227) very justly maintaining that "the movements both upwards and downwards exhibit sublime indifference to the varying fortunes of our political parties." Nevertheless, he, too, limits his discussion to the fluctuations which have taken place in British Government securities during the past ten to twenty years, and fails to observe the parallel which exists between these and the movements of the securities of foreign States. And it is precisely in the identity of the fate of German, French, and English State securities during these decades that the pith of the matter lies. Not only have the State securities become depreciated in all these countries, but the relation between the State securities and other classes of investments is the same in the experience of each country.

To suppose that the recent constitutional struggle in England exercised any sort of baneful influence on the "credit" of Consols is altogether erroneous. Neither the opposition between the two Houses of Parliament, nor the electoral struggle between the two parties, nor yet the delay in the passing of the Budget, nor even the Socialistic reform of taxation, exerted any such influence.

Even if the experience of England did not suffice to prove this point, a comparison of her experience with that of Continental countries during the same period would confirm it. Germany alone furnishes very strong evidence of the fact that the credit of our State securities cannot have been shaken in the least degree, evidence which is perhaps more conclusive than that which rests on the similarity of international experiences. The Prussian State Railways constitute a very lucrative investment, whose annual revenue has for many years past not only paid the interest on the loan capital sunk in the enterprise, but has yielded, over and above this, an annual surplus of eleven to twelve millions sterling. In the absence of such a surplus, which is absorbed by the general needs of the State, a corresponding sum would have to be raised by fresh taxation. According to the estimate we may adopt of the amount of capital involved in the State Railway system, we may assess the profits on this or that side of 10 per cent. We might, without being guilty of exaggeration, suggest that the railway capital, whose value is considerably above the figure of the Prussian Debt, affords an absolutely unparalleled security to the holders of the stock. And yet we are faced by the remarkable fact that the securities of the German Imperial Government, which represent mainly unproductive expenditure, and have behind them no such profitable capital as that which covers the Bonds of the Prussian Railway system, nevertheless stand as high to-day, and have always stood as high as the Prussian Bonds. They rose at the same time and fell at the same time. This proves conclusively that no shaking of "credit" was responsible for the fall in price either of the Prussian or the German Bonds. The very exceptional guarantees that lie behind the loans of the Prussian State have been, and remain, of no account in the question of the Prussian State credit.

The credit of the German Empire requires no guarantees of this nature. The real guarantee for the credit of a State is of quite a different kind. It lies in the prosperity and the taxable capacity of the population, in the administration of justice, the stability of political institutions, the unshaken confidence these inspire, and so forth. This is equally true of Germany and of other countries at a similar level of political and financial development.

II.

The depreciation of Government securities is not a national phenomenon; it is an international fact due in all cases to similar

causes. So long as this is not understood each country will continue its lamentations, and its attempts to remedy the evil—attempts which bear a very strong resemblance to each other.

The national credit of Great Britain had not risen when the 2½-per-cent. Consols rose, from 94½ in October, 1890, to 113½ in July, 1896. The Prussian national credit had not improved when the Prussian Bonds rose from 86 per cent. in 1890 to nearly 100 in 1898. Nor did the British national credit suffer because the 2½-per-cent. Consols fell to 92 in May, 1903, and to 74½ in August, 1912. Nor, again, was Prussian credit in any way damaged by the fall of the Prussian State securities from par in 1899 to 80 in August, 1912. The case of France was very similar. The 3-per-cent. rente rose from 91½ in 1891 to 105¼ in 1897, and then began to decline until in August, 1912, it stood at 92½. Neither rise nor fall had any connection with the state of the French national credit.

The cause for the movement of prices must then be sought elsewhere. This does not mean that a shock to, or a consolidation of, the national credit is never accountable for fluctuations in the price of State securities. In many instances such an event has proved the decisive factor. The rule of President Porfirio Diaz, no doubt, exerted a steadying influence on the national credit of the Mexican Republic, and consequently raised the price of Mexican securities. And it is equally possible that the different *régime* that followed produced the opposite consequences. But there is no sort of evidence, and no possible ground for the belief that the fluctuations in the price of Consols in England, France, or Germany, are due to an analogous cause.

What then is the real cause? The anonymous "Stockbroker" would appear to be on the right track when he says (p. 226), "The Colonial Stock Act, 1900, again, is often said to have had a great deal to do with the fall, because it enlarged the investment powers of trustees. But British railway ordinary stocks are not, and never were, in the trustee class, and yet, as we have seen, they have fully shared in the depreciation." And further, "The readiness of the ordinary British investor to buy foreign and colonial investments had not made itself much felt in 1896, but it cannot be denied that this readiness now exists and that it is increasing. Many who once refused to look at a foreign or colonial share or bond will now buy nothing else. . . . The reports of the Commissioners of Inland Revenue show how considerable the flow of British capital to foreign and colonial countries has become."

These movements in the various kinds of investments are accurately illustrated by means of instructive tables.

For many years past I have indicated the probability of an analogous movement in the prices of different kinds of investments. But a study of the German money market yields results, which differ in detail. We have not, during the past twenty to thirty years, had any railway stocks or debentures whose fluctuations we could compare with the movements in prices of our State securities or other investments. For the majority of our chief railway lines have long since passed from the control of public companies to that of the State. But there are other investments which can be used to institute the desired comparison—for example, the shares of the great banking companies. Take the shares of the *Deutsche Bank*. At the end of 1896 these stood at 196 per cent. and paid a dividend of 10 per cent. At the end of August, 1912, they stood at 259, after paying a dividend of 12½ per cent. for the previous year. In 1896, therefore, the yield of these shares was 5·26 per cent.,¹ but in 1912 these shares yielded (on a similar calculation) no more than 4·94 per cent. What we find, therefore, is not a parallel development between German Government securities and these *Deutsche Bank* shares, but a movement in opposite directions. In other words, the decline which "Stockbroker" observed in the prices of English Consols and English railway shares, in contrast to the reverse movements of colonial and foreign investments, finds its exact counterpart in the contrast between the movements of German Government securities and the shares of the *Deutsche Bank*.

It will be instructive to take further instances out of the German price list. The shares of the *Disconto Gesellschaft*, another leading German bank, stood at 211½ at the end of 1896, and paid at the time a dividend of 10 per cent. In 1911 they paid the same dividend, and in August, 1912, they were quoted at 189¾. Hence the yield was 4·88 in 1896, 5·46 in 1911. Here the movement is in the direction opposite to that observed in the case of the *Deutsche Bank*.

Or take the shares of the *Dresdner Bank*. They paid a dividend of 8 per cent. in 1896, and the quoted price at the end of that year was 161 per cent. The yield, therefore, was 5·1 per cent. In 1911 they paid 8½ per cent., and at the end of August, 1912, were quoted at 157½. The yield is 5·6. Here, too, we find a development parallel to that of the State securities. This

¹ In this calculation the 6 per cent. dividend, included in the price quoted, has been deducted, and the 4 per cent. current interest correspondingly added.

corresponds to the parallel found by "Stockbroker" between English Consols and English railway shares.

It is no part of my present purpose to investigate the movements of investments in general. I should, in any case, prefer to leave such a task in the hands of experts in this subject. Moreover, exact calculations based on the material hitherto available will not achieve exactly what I have in view. My survey is directed to the future, and to the coming movements in prices. I believe that only in the course of years shall we see the gradual accomplishment of a progressive equalisation of prices in the stock markets. This will be effected by a further drop in the hitherto high-priced State securities, and a rise in price of investments in foreign State securities and in home and foreign shares. Or, in other words, the yield of home Government securities will be greater than before, while the yield of the hitherto much more profitable investments will fall steadily.

Even the isolated examples given above of the fluctuations in the prices of bank shares, show that investment in shares of the *Deutsche Bank* during the period 1896-1912 was considerably more profitable than investment in English, French, or German Government securities. The latter resulted in great losses, the former in great profits, both as regards dividend and capital. Large capitalistic undertakings similar in character to the *Deutsche Bank* (banking companies, industrial concerns, &c.), will, in view of the advantages they offer, become increasingly attractive to investors in proportion as they prove themselves willing to submit to sound methods of administration; while Government securities, notwithstanding the unexceptionable character of their "credit," must suffer increasing depreciation, because they do not offer the investor equally favourable terms.

III.

What advantages are involved in the low rate of interest so long adhered to by the Government securities of England and Holland?

A low rate of interest undoubtedly means a proportionately small burden to the State that has to pay it. On the other hand, the creditors of the State are better off if they get a high rate. They will submit to a low rate only under pressure of special circumstances. David Ricardo, for instance, adduced as an obstacle to the equalisation of the return on capital in different countries "the natural disinclination which every man has to

quit the country of his birth and connections. . . . These feelings, which I should be sorry to see weakened, induce most men of property to be satisfied with a low rate of profits in their own country rather than seek a more advantageous employment for their wealth in foreign nations." (*Principles of Political Economy and Taxation*, ch. vii.) This obstacle is by no means so formidable to-day as it was a hundred years ago. Many causes have contributed to bring about the change, but we note more especially the fact that a man need no longer "quit the country of his birth," since a large variety of foreign investments are now accessible to him in a form which makes such emigration unnecessary. According to the rates quoted on the London Stock Exchange, 4 per cent. Argentine loan and 4 per cent. Brazilians yield $4\frac{1}{2}$ per cent.; 4 per cent. Mexicans yield $4\frac{1}{3}$; 4 per cent. Russians $4\frac{1}{8}$; 4 per cent. Japanese $4\frac{3}{8}$. If we compare these figures with the securities of Governments of the first rank, we find that English Consols yield $3\frac{1}{3}$ per cent., Prussian and German Consols $3\frac{3}{8}$ per cent., Italian $3\frac{1}{2}$, French $3\frac{1}{4}$. The difference is trifling enough to be accounted for by the difference in wealth of the countries concerned. The improved political and economic conditions of States such as Argentina, Brazil, Mexico, Russia, and Japan, make their stock very attractive to capitalists who desire to secure 1 per cent. more than the securities of their own first-class State will yield. Yet these are but a few instances out of the wealth of opportunities for investment open to the capitalist all over the world, at home and abroad, and with or without the formality of paper securities. The financier has as wide a range to-day as the man who is actively engaged in business enterprise. He must be left a free choice among investments that commend themselves to him as safe and profitable, and no expedient can stem the tide of this new development.

We might have supposed—since the changes in the rate of interest recently experienced are connected with the causes just described—that they would occasion considerable satisfaction to the owners of Consols, who, alike in England and on the Continent, receive a correspondingly higher rate of interest. And yet the stockholders complain. They do not complain, naturally enough, of the higher rate of interest which they receive, but of the decline in the value of their holding. The latter is, however, indissolubly connected with the former. A considerable portion of the grievance in Germany lies with the "widows and orphans," who complain that their property has depreciated, because they have invested it in home securities. There are, of course, two

sides to the question. When State securities are purchased at a low figure for widows and orphans these receive a proportionately high return on their capital. But if there should be a forced sale at a lower figure than the original purchase price, a loss is inevitable.

This is self-evident. But beneath the grievance there lies the extraordinary assumption that when the State borrows it incurs a quite peculiar obligation towards its home creditors. And this assumption is quite unwarranted. The practice of investing in home securities dates from an epoch when this kind of investment was distinguished from all others by its superior safety. But there were fluctuations in value even then, and investors had no option but to put up with them. The profits that must have been made in consequence of such fluctuations are never heard of, but the losses bulk large. In short, fluctuations and their consequences are unavoidable, for there is no kind of investment whose price is not subject to change in the course of time.

The complaints made on behalf of the State, whose burdens are increased by the higher rate of interest it is now forced to pay, have more justification. And the complaints are timely, since the indebtedness of Governments is more likely to increase than to diminish. On the other hand, we may rest assured that this increased indebtedness has in no way contributed to the rise of the rate of interest, the increase having in no sense shaken or diminished the national credit. Indeed, it is more probable that the stream of credit will flow more abundantly than ever, since European and other nations are more willing to contract loans than to pay interest. Of such a development it is impossible to forecast the limits.

As we look forward into the financial future of our States and Empire, it becomes an interesting problem—assuming the point to have been reached when public credit will be exhausted—to inquire what constitutes a tangible basis for credit. The question is of interest now, and will long continue to be so, in connection with the credit of the German Empire as compared with the credit of the Prussian State and its productive State Railway capital. That there must be some limits to this development no one will be prepared to deny, even though these limits are not yet visible, and though the raising of fresh loans will probably continue for some years, owing to the existing competition among nations. Nor is it open to dispute that these loans serve unproductive purposes, and so differ fundamentally from productive invest-

ments such as the State Railway system. They are obviously incurred to fill in the gaps in a system of taxation too inelastic to meet the growing needs of the State. Retribution in the inconvenient form of increased interest is immediate; but a greater retribution is in store, for eventually there must come a depression of the national credit, so that the evil which is an illusion to-day may actually become an accomplished fact. For in the last resort the raising of loans for unproductive purposes—loans which have no value behind them, and which are expended without creating values, are not sound finance. Further, the competition of nations in armaments has given an impetus to the creation of fresh loans, and the competition in armaments has become a competition in unproductive debt. The more recklessly a State proceeds in this course the further it will outstrip other States in the possession of armaments, and of debts. The greater, however, its financial strength, the longer it will be able to keep up the race. It remains for us to investigate in detail out of what elements the financial strength of a State is built up.

In the meantime, it is some consolation (but one which is perhaps fraught with danger to the future) that the actual effective financial strength of the several Powers to-day far surpasses our anticipations.

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PANAMA CANAL TOLLS AND THE THEORY OF MONOPOLY PRICES.

THE action of the Government of the United States in exempting American coastwise shipping from the payment of tolls in the Panama Canal has raised an interesting question as to the effect of this indirect subsidy upon the tolls which will be charged to other vessels using the canal. The concession granted to coastwise vessels will obviously reduce the income from the canal: it has been asserted that this loss can be covered by collecting larger tolls from other shipping, *i.e.*, from foreign and American shipping engaged in international trade.¹ In the present paper it is proposed to examine, in the light of the theory of monopoly prices, the possibility of such a shifting of the toll burden.

The American Government, with its monopolistic control of the canal, will, it is assumed, attempt to get as large a revenue as possible from its great enterprise on the Isthmus. It is true that a more or less formal statement was made by President Taft that the Government did not propose to attempt to "make money" out of the enterprise, but inasmuch as the most optimistic estimates of the income from tolls give a sum which is little over fifty per cent. of the interest on the investment alone, such a statement of policy, even if it were binding on Congress, would not seem to have any immediate bearing on the case. By the time the canal is in full operation it will have cost in round numbers at least \$400,000,000. Interest at 3 per cent. on this sum would be \$12,000,000 per annum. Cost of operation and maintenance can hardly be less than \$5,000,000, giving a total annual expenditure of \$17,000,000. If we add to this a small sinking fund provision of, say, \$4,000,000, we get a total charge against the enterprise of \$21,000,000, which would have to be covered by tolls before the Government could be said to be making a profit. A liberal estimate of receipts from tolls, based on the tonnage of vessels which might have used the canal in 1909-10, had it then been in existence, places the revenue at something

¹ See *London Times*, September 27, 1912; also an unsigned article in the *Quarterly Review*, for October, 1912, on "The Panama Canal."

over \$6,000,000 per annum.¹ Therefore, even without taking into account any increase in operating expenses with increased tonnage, the business of the canal must grow to three-and-a-half times the estimated volume of 1909-10 before a profit can be realised and the incentive to seek the highest monopoly revenue cease to exist. It is safe to say that for a practically indefinite period the tolls will tend to be fixed on the monopoly principle of "what the traffic will bear." This, then, is the first assumption.

A second assumption is that there will be two classes or grades of "users" of the canal, vessels engaged in international trade and those engaged in American coastwise trade, and that these will be of different degrees of "sensitivity." The factors which will determine whether or not a particular vessel will use the canal, instead of continuing to follow its present route *via* Suez, or Magellan, or the Cape of Good Hope, will be numerous; including such items as saving of distance, distances between coaling stations, cost of fuel at those stations, opportunities for picking up way freights, &c., &c. The amount which a vessel can afford to pay in tolls will be determined by a combination of these factors, and it is obvious, even without elaborate analysis, that the situation of the canal is such that American coastwise shipping will make the greatest savings and could therefore afford to pay the highest tolls. To make assurance doubly sure, however, a few figures may be presented. If in 1909-10 the canal had been in operation, and no toll whatever had been charged for its use, the tonnage of vessels engaged in international trade which would have made a saving by choosing that route would have been approximately 13,827,000; and of vessels engaged in American coastwise trade, 1,048,000. A toll of eighty cents per net registered ton would have driven away from the canal 41 per cent. of the international shipping and only 4 per cent. of the domestic. At one dollar per ton, 54 per cent. of the international would have used other routes and only 10½ per cent. of the domestic shipping. At one dollar and fifty cents per ton 80 per cent. of the international shipping would have disappeared from the canal and only 28 per cent. of the coastwise. Two dollars per ton would have eliminated 90 per cent. of the former and only 38 per cent. of the latter.²

¹ Based on data contained in the "Preliminary Statement on Panama Traffic and Tolls," by E. R. Johnson, Special Commissioner on Panama Traffic and Tolls; Senate Doc. No. 575; 62nd Congress, 2nd Session; Washington, Government Printing Office, April, 1912.

² From data contained in Professor Johnson's report, already mentioned, on Panama Traffic and Tolls.

With the actual opening of the canal this difference in sensitivity of the two classes of users will be still further emphasized. To the second class, the domestic coastwise vessels, will be added a large volume of shipping which will be called into existence by the new opportunities. The bulk of this will be in vessels engaged in traffic between the Atlantic and Pacific seaboards of the United States carrying goods which now are transferred by rail. The amount of tonnage which will be required to handle this trade can only be conjectured, but a conservative estimate would place it at over 3,000,000.¹ The toll which could be charged to this shipping would be limited by the difference in cost (including all elements of time, expense, &c.) between a 5,200-mile all-sea route and a 2,000 to 3,500-mile all-rail route involving the surmounting of mountain passes from 5,000 to 8,000 feet in elevation. It is not likely that a toll of even four or five dollars per net registered ton (two dollars to two dollars and a half per cargo ton) would seriously interfere with this traffic.²

The problem under consideration may, therefore, be stated as follows :—

Assuming (1) that whatever blunders the American Government may make through ignorance of the principles involved, the operation of economic forces will compel them, in the long run, through the medium of a desire to get the greatest possible revenue, to fix the tolls on the basis of "what the traffic will bear";

(2) that there are two distinct classes of users, one of which (coastwise shipping) shows a less sensitivity than the other (international shipping), and

(3) that the rate will be uniform for all vessels on which tolls are charged;

what will be the effect on the toll rate of an exemption granted to the less sensitive user?

The question presents what is really nothing more than a special case in the general theory of monopoly prices as that theory has been expounded by numerous economists.³ In general, writers have centred their attention chiefly on the

¹ Based on a Report of the Harbour and Shipping Committee of the Board of Trustees of the Chamber of Commerce of San Francisco upon the Utility of the Panama Route for Freight Transportation between San Francisco and the Atlantic States. *November 16, 1907.

² Estimates from the data contained in the report of the San Francisco Chamber of Commerce, just mentioned, would place the limit even higher than this.

³ Among others Professor Marshall in his chapters on "The Theory of Monopolies," and Professor Edgeworth in his articles on the "Theory of Railway Rates" in *the ECONOMIC JOURNAL*, September and December, 1911, and June, 1912.

correlated case in which, with various "strata" of purchasers, the more sensitive, instead of the less sensitive, have been eliminated by changed conditions or advancing prices. Such, for instance, is the case of a railway which loses, or is forced to reduce the rates on, through traffic, as the result of the opening of competing lines, and seeks to recoup its losses by raising rates on way traffic which has no alternative routes. The present case is analogous to that of a gas company which, through the establishment of a competing electric lighting company, loses its wealthier and stronger customers who prefer and can afford to pay for the more modern form of illumination, or a railway company which for reasons of policy grants free passes to a considerable number of wealthy citizens.¹

It is obvious that if a price were being fixed for two classes of customers separately the maximum-revenue rate for the less sensitive (or stronger) would be higher than for the more sensitive (weaker). Successive advances in price are accompanied by successive decreases in demand. So long as increase in price causes a decrease in demand which is less, proportionately, than the change in price, revenue will be augmented by rise in price; when the two ratios become exactly equal income will be stationary; but when decrease in demand becomes greater than increase in price, income will decline. It is clear that with the less sensitive buyers, *i.e.*, those whose demand is less affected by a rise in price, the point of diminishing revenue will be reached later, *i.e.*, at a higher price, than in the case of the more sensitive.

The problem before us involves the investigation of the combined revenues from two sets of purchasers of this sort at prices which are uniform for the two. The maximum-revenue price for the more sensitive purchasers will lie at some definite point which we may call p_1 ; for the less sensitive the maximum-revenue price would be higher, say p_2 . We are to determine the point at which price must be fixed for the two together in order that the sum of the incomes may be a maximum. Clearly, the price for the two cannot be less than p_1 , for all prices below that point produce a lower revenue from both classes of demand. Similarly, price cannot be placed higher than p_2 , for any higher rate produces diminishing return from both purchasers. The price which will yield the highest combined revenue, therefore, cannot be less than the maximum-revenue price for the more sensitive purchasers alone, or more than the maximum-revenue

¹ See Professor Edgeworth, *ECONOMIC JOURNAL*, June, 1912, page 209.

price for the less sensitive alone. This fact may be illustrated by diagram, as in Fig. I., where distances measured in the direction OX represent price; distances in the direction OY, revenue; OQX and ORX, the revenue curves for the two sets of purchasers; and OSTX, the combined-revenue curve.

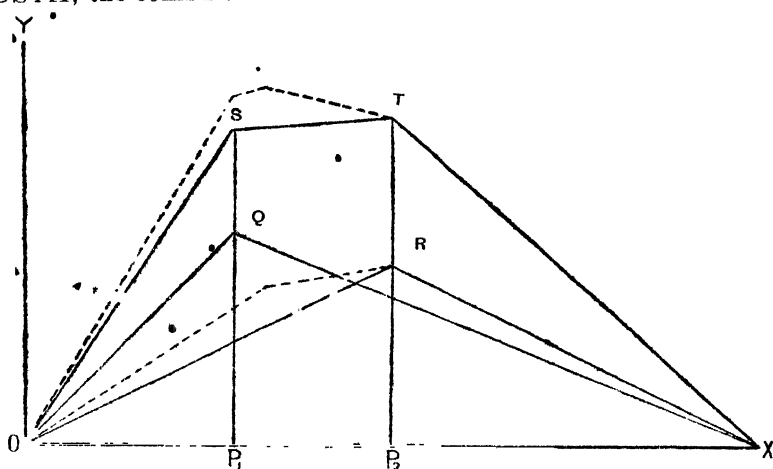


FIG. I.

In this diagram it is assumed that the rates of increase and decrease in revenue are uniform, *i.e.*, that the revenue "curves" are made up of ascending and descending straight lines. Such "curves" probably have no counterpart in actual experience, for changing price is not usually accompanied by such uniformity in alterations of demand, but so long as there are distinct revenue maxima in the two curves respectively the character of the successive steps by which revenue approaches or declines from those maxima, *i.e.*, the particular forms which the curves may take, can make no change in our conclusions. As we approach P_1 from zero, revenue from both classes of purchasers will continue to increase until price P_2 is reached, even though there may be irregularities in the rates of growth; consequently the sum of the two revenues must also continue to grow up to the same point. Similarly, the combined revenues must decline beyond the maximum-revenue price, P_2 , for the less sensitive purchasers.¹

¹ A fall in revenue from the less sensitive purchasers, before the maximum-revenue price for that class is reached, followed by a rise in revenue up to that maximum, might conceivably draw the combined-maximum-revenue price down to a point lower than P_1 , as in Fig. II (see next page), but this could happen only if what we have been calling the less sensitive class of purchasers were itself a composite made up of two classes; one of which was of large volume and of so high a sensitivity that it disappeared at a price well below P_2 . This would, however, be contrary to our premise. We should have, instead of two sets of purchasers, three, two of which would be of high sensitivity, and one of low sensitivity.

At rates between the two maximum-revenue prices for the two sorts of purchasers, the case is not quite so simple. Successive increments in price from P_1 towards P_2 will yield diminishing revenue from the more sensitive purchasers and increasing revenue from the less sensitive. May there be a rate somewhere between the two prices which will yield a maximum combined revenue? The answer will depend on the exact relation which exists between the rate of increase of the one revenue and the rate of decrease of the other. If the increase in revenue from the less sensitive is exactly balanced by the decrease in revenue from the more sensitive, the resultant total revenue will remain constant between the prices P_1 and P_2 ; if gain from the former

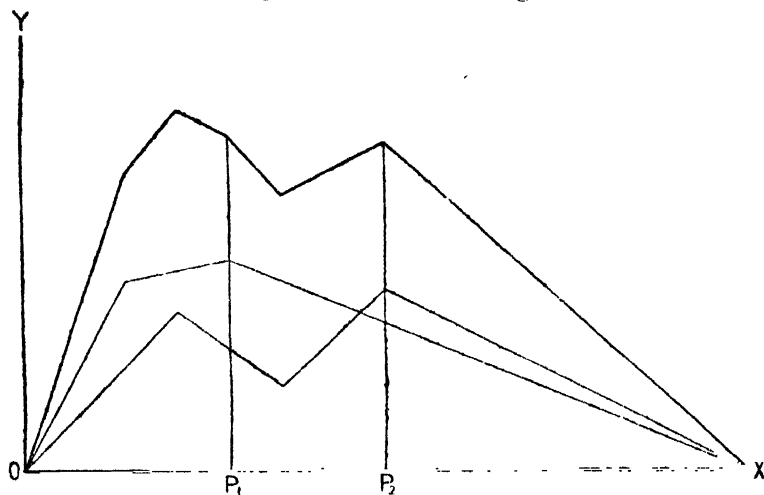


FIG. II.

exceeds loss from the latter the combined revenue will continue to increase until the maximum from the former is reached, namely, at P_2 ; but if gain from the one is less than loss from the other, the combined maximum income will be found at the lower price, P_1 . If, however, there happens to be a change in the rate of revenue increase or decrease between the two prices P_1 and P_2 , there may be a definite combined revenue maximum somewhere between the two. For example, if, with successive increments of price from P_1 towards P_2 , the increase of revenue from the less sensitive purchasers is at first more rapid than the decline in revenue from the more sensitive, but later these conditions are reversed, the sum of the two revenues may be greatest at the point where this change takes place, between P_1 and P_2 . Such a case is illustrated by the broken lines in Fig. I.

The conclusions from this analysis may be stated in the follow-

ing form : In fixing a uniform maximum-revenue monopoly price for consumers who are made up of two classes of different sensitivity, that price will (a) coincide with the maximum-revenue price for the more sensitive consumers alone, or (b) with the maximum-revenue price for the less sensitive alone, or (c) it may lie between the two ; it never can be lower than the former or higher than the latter.

A corollary of this law is that if a monopoly has fixed a price for a demand which is composite, at such a point as to get maximum revenue, and later eliminates the stronger, less sensitive purchasers as revenue producers, it cannot make good the loss by raising the price for the remaining consumers. Under certain conditions the price may remain unchanged ; under others it may be lowered ; but it never can be raised.¹

If these principles be interpreted in terms of the effect on foreign vessels (and American vessels engaged in international trade) of the exemption of coastwise shipping from the payment of canal tolls, they mean that the revenue which the United States Government loses by cutting out the latter as income producers cannot be recovered by raising the rate of tolls on the former. The exact results of the concession to coastwise shipping will vary somewhat with changes in the volumes of the two classes of shipping, and the precise relations which exist as to their sensitivity. Under certain conditions, after the exemption, the toll rate may remain unchanged ; under others, it may be lowered ; but so long as the bulk of the coastwise shipping saves more by using the canal than does the international shipping, and the American Government feels the necessity of getting as large a return as possible on its investment, the concession can never result in an increase in the toll rate.²

LINCOLN HUTCHINSON

¹ In a certain strained sense of the words it is of course true that under some circumstances the monopoly does recover part of its loss from the remaining consumers, for whenever conditions are such that the elimination of the less sensitive purchasers produces a lowering of price to those who remain, this lower price gets from them as a class a larger aggregate revenue than the old, higher price. The net loss in revenue is less than the amount of the eliminated revenue.

² These conclusions may be confirmed by fairly simple calculations based on the data contained in Professor Johnson's report already referred to. They show that in 1909-10, if the canal had been open, the maximum-revenue toll for shipping engaged in the international trade alone, would have been about eighty cents per net registered ton ; for American coastwise shipping alone, two dollars and thirty cents per ton ; for the two together one dollar per ton. In other words, the exemption of coastwise shipping would have lowered the maximum-revenue rate from one dollar to eighty cents.

A MORE STABLE GOLD STANDARD.

IN a recent address on the high cost of living, before the International Congress of Chambers of Commerce, I briefly described a proposal for rendering the gold standard more "stable" by virtually increasing the weight of the gold dollar or sovereign, so as to compensate for losses of purchasing power. I mentioned also the fact that Governor Woodrow Wilson, now President-elect of the United States, had at one time suggested essentially the same idea.

Partly because so much interest has been manifested in the proposal, both among academic economists and business men, and partly because, for lack of a fuller statement, the proposal has been so often misunderstood, I am using such space as is available in this issue of the JOURNAL to formulate in some detail the main features of the proposal. A much longer and fuller explanation, with discussions of difficulties and objections, will be published in the February issue of the *Quarterly Journal of Economics*. The reader is also referred, for a general statement of the plan in relation to other suggested remedies for rising prices, to my book, *The Purchasing Power of Money*, in the closing chapter of which I discuss the question, "Is the Price Level Controllable?"

Readers of this JOURNAL do not need to be told that the gold standard, as it exists at present, is unstable. The sovereign, for instance, is not a constant unit of purchasing power. Anyone who will read the literature of the last decade on rising prices, or the antecedent literature in the 'eighties and 'nineties on falling prices, will realise the shallowness of the notion that "gold is stable." I commend especially the reading of Sir David Barbour's recent book, *The Standard of Value*, which contains an analytical study, both of the long period of falling prices, 1873-1896, and of the present period of rising prices, beginning in 1897. As he has so well shown, it would help greatly if, instead of using the phrase "a rise in general prices," we should ordinarily use the

equivalent phrase, "a fall in the purchasing power of the sovereign."

In all business relations involving time, in which money payments are fixed, whether by contract, by law, or simply by custom, any great change in the purchasing power of the monetary unit causes a transfer of wealth, enormous though unrealised, from one set of owners to another. Those who feel the pinch naturally complain, though quite unconscious of the cause of their difficulties. We therefore heard complaints in the 'eighties and 'nineties of "depression in trade," and are hearing at present complaints of the "high cost of living."

It is not pretended that to stabilise the purchasing power of the sovereign would banish all complaint, much less serve as a substitute for progressive economies in industry, finance, and commerce. A stable monetary unit for measuring general purchasing power will not be a substitute for the fertility of the soil any more than a stable yardstick for measuring cloth is a substitute for an efficient method of weaving cloth. Nevertheless, few reforms would be more far-reaching than standardising the monetary yardstick. The experience of the last thirty years, when rightly interpreted, demonstrates the imperative need of standardising the sovereign, the dollar, the franc, the mark, &c., as units of purchasing power. Each is now fixed in weight but variable in purchasing power. It would be a great advantage if they could be fixed in purchasing power even if variable in weight. Of all commercial units the monetary unit alone, although the most important, has thus far been left unstandardised.

The following is believed to be a practical method of standardisation. Whether or not it is ever adopted—and I realise the enormous inertia to be overcome—its discussion which has been begun should at least serve the purpose of demonstrating the need—not yet generally felt—of monetary standardisation. It may also lead to some better method of attaining this end. The following plan has at least a merit lacking in all former plans for regulating the purchasing power of money, that its operation would be as automatic as the operation of the mint. It would require no manipulation of the currency at the discretion of Government officials.

The proposal is to increase, and to vary periodically, the weight of the bullion basis of the dollar—or the sovereign—(according to the indications of an index number of prices) in such a manner as to compensate for any future losses in the purchasing power of each grain of gold by increasing the number of grains which

go to make the dollar—or the sovereign. It may be called a plan for “a compensated sovereign,” a plan practically to convert the gold standard into the multiple standard.

But how could this be possible? (1) How could the weight of the sovereign be increased without literally having gold sovereigns of many different weights in circulation or a recoinage every year or month, and (2) how could we know how much to increase the weight of the dollar from time to time?

The answer to the first question—how to virtually increase the weight of the gold dollar without literally doing so—is easy as soon as we recognise that the ultimate basis of the sovereign is the gold bullion with which it is interconvertible. A sovereign of 123·27 grains must now always have the same value as 123·27 grains of gold bullion, 11/12 fine. This quantum of bullion may be called the “virtual sovereign,” or the “redemption bullion.”

To be exact, by redemption-bullion is meant the amount of gold bullion which the owner of a gold dollar or sovereign can get for it if he wishes to redeem it in bullion.

Now it is evidently unnecessary that the weight of the redemption-bullion should be the same as the weight of the sovereign, just as it is unnecessary that the silver shilling or rupee shall be worth, as silver, the gold in which it may be redeemed. It is essential, however, that redemption-bullion shall be available. It is the possibility of turning gold sovereigns or gold certificates into commercial bullion which is the essence of the gold standard. Without some sort of convertibility into bullion, we should not have a gold standard but only fiat money.

The present proposal is to increase and vary, from time to time, the weight of the redemption-bullion without necessarily disturbing the weight of the coined sovereign or dollar. Suppose, for instance, that the redemption-bullion had been gradually increased since 1896 until to-day it were 25 per cent. heavier, or 154·09 grains, while the actual gold sovereign were still 123·27 grains. This means that the Government would now be redeeming on demand each gold sovereign in 154·09 grains of gold bullion, just as the Indian Government now redeems the rupee at a fixed ratio to gold bullion.¹ Gold sovereigns would, in such a system, be mere tokens—like silver shillings or rupees—entitling the holder to gold bullion.

As to convertibility in the other direction, the Government

¹ Of course, all gold sovereigns indiscriminately would be so redeemable whether old or new, *i.e.*, whether originally minted for 123·27 grains of bullion, or later for a larger amount.

mint would stand ready to give back a gold sovereign for each 154·09 grains of bullion plus a slight coinage fee or "brassage" of, say, 1 per cent. This brassage charge would serve, as afterwards explained, to prevent loss to the Government by speculation. If it were 1 per cent. it would be 1·54 grains to be added to the 154·09, making 155·63 grains in all as the bullion required at the mint to secure a gold dollar. This may be called the "mint-bullion."

Thus there would be two quanta of gold bullion, slightly differing from each other—154·09 grains and 155·63 grains—the former, or "redemption-bullion," being the quantum which the Government would *give* for a gold sovereign, and the latter, or "mint-bullion," being the quantum it would *take* for a gold sovereign. The difference is a sort of Government commission. The difference between the mint-bullion (155·63 grains) and the bullion in the gold sovereign (123·27 grains) is 32·36 grains, and would be retained by the Government as a part of its bullion reserve for redeeming gold coin. Of this 32·36 only 1·54 is brassage; the remainder, 30·82 grains, may, for want of a better term, be called "seigniorage." That is, the so-called seigniorage is the difference in weight between the literal sovereign and the virtual sovereign—the bullion in which it could be redeemed. The plan might therefore be roughly described as one to restore the ancient custom of seigniorage.¹

We may also express these operations in commercial language as follows: When the Government redeems gold sovereigns in gold bullion it is *selling bullion*; when it mints gold sovereigns from bullion it is *buying bullion*. At present the price of gold 11/12 fine is £3 17s. 10½d. an ounce (or at the Bank £3 17s. 9d., the difference of 1½d. in the £ being compensation for delay in minting), and never varies. This is, to all intents and purposes, the redemption-price at which the Government or the Bank sells gold bars, as well as the "mint-price" at which it buys them. It creates the market price of gold. Under the plan proposed, when the redemption-bullion was 154·09 grains (or 5/4 of the weight of the sovereign), the *redemption price* would be 4/5 of the present price, i.e., $\frac{123\cdot27}{154\cdot09}$ of £3 17s. 10½d., or £3 2s. 3½d. per ounce, while the *mint-price* would be $\frac{123\cdot27}{155\cdot63}$ of £3 17s. 10½d., or £3 1s. 8d. per

¹ This "seigniorage," however, would be peculiar in that it would be created not by reducing the coin, but by increasing the bullion behind it; would not be fixed arbitrarily, but would be automatically adjusted (as explained later); and would not belong to the Government for its own profit, but would be a trust fund for redemption purposes only.

ounce. Thus the Government would stand ready to sell gold at £3 2s. 3½d., and to buy it at £3 1s. 8d., the difference, 7½d. per ounce, being the "brassage" or Government commission.

The two operations, selling (or redemption) and buying (or minting), would keep the value of the sovereign not less than the redemption-bullion of 154.09 grains, and not more than the mint-bullion of 155.63. In other words, the official prices for selling and buying gold would fix its market price between the limits of £3 2s. 3½d. and £3 1s. 8d. per ounce. Of course the "seigniorage" must never be negative. If, for instance, the mint-bullion were 61.63 grains, half as much as in the sovereign, every sovereign could be melted and the bullion so obtained taken to the mint and exchanged for two sovereigns, these melted and converted into four, and so on in an "endless chain." An obvious proviso in the proposed plan would therefore be that the redemption-bullion must never be lighter than the sovereign itself. The present indications¹ are that gold will continue to depreciate so that the redemption-bullion, in order to maintain the same purchasing power as the present sovereign, would need in general to increase in weight in the future. If, however, it should ever happen that the redemption-bullion should shrink in weight to 123.27 grains, then the proviso that it should never fall below this figure would come into operation. So long as it remained at 123.27 grains it would cease to be adjustable, and to maintain a constant purchasing power. As at present it would have a constant weight, but varying purchasing power.

We are now ready to explain why two prices—the mint-price and the redemption-price—of gold are necessary. If the Government were to both buy and sell at the same price, every expected shift of that price would lead to speculation embarrassing to the Government. For instance, if the mint-price were to-day, say, £3 per ounce, and if it were known or expected that to-morrow the price would be raised to £3 0s. 6d., speculators would to-day buy of the Government gold bullion and sell it back to-morrow at an advance of 6d. per ounce. The opposite speculation would accompany a drop in the official price. If, however, the Government protects itself by charging a slightly higher price than it pays, it is evident that no such speculation would ensue if a provision be made that this pair of prices shall not be shifted by more than the margin between them.

Let us suppose that the two prices differ by a "brassage"

¹ See the writer's "Will the Present Upward Trend of World Prices Continue?" *American Economic Review*, September, 1912.

margin of 1 per cent., and that the pair of prices are to be adjusted quarterly. This permits a maximum movement up or down of 4 per cent. per annum, which, though it may not be always sufficient to maintain absolutely constant the purchasing power of the monetary unit, will always tend in that direction.

The important question remains: How can we know what changes to make from time to time in the weight of the redemption-bullion or "virtual sovereign"? The answer is: By index numbers of prices, such as those of Sauerbeck, *The Economist*, the British Board of Trade, the United States Bureau of Labour, or the Canadian Department of Labour. Almost any one of these would afford a good guide, and they all agree fairly well. In my book on *The Purchasing Power of Money* I have discussed in detail the relative merits of various forms of index numbers.

When once a system of index numbers is decided upon, their numerical calculation becomes a mere matter of clerical arithmetic. If the official index number should at any time show the price level to deviate by, say, $\frac{1}{2}$ per cent. above the base level from which the system started, it would become mandatory to correct the redemption-bullion by increasing it $\frac{1}{2}$ per cent. (i.e., to decrease the bullion prices by $\frac{1}{2}$ per cent.), and similarly for any other deviation from par, subject, of course, to the restrictions above imposed. Thus, if the price level deviated by 3 per cent. below the original par, the redemption-bullion could be corrected only to the extent of 1 per cent. in any one quarter of the year; but the full correction could be reached in three quarters unless the deviation were aggravated in the meantime; and in that case the correction would follow steadily on the heels of the deviation.

The plan then, in brief, is this:—

(1) To institute an official index number of prices, selecting some initial year, such as 1915, as the base of reference, the price level for that year being called 100 per cent.

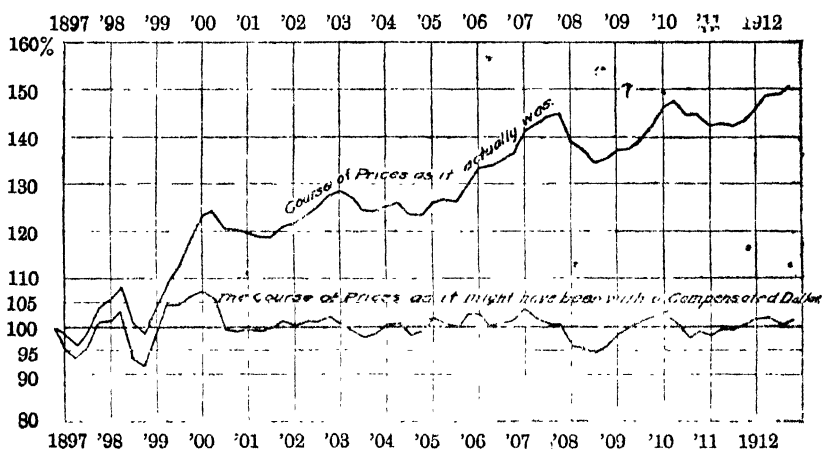
(2) The Government to readjust the official weight of the "redemption-bullion," or the "virtual dollar (or sovereign)" (the quantum of bullion in which it will redeem the gold dollar or sovereign) at regular intervals, say quarterly, according to the finding of the index number. If at any time the index number deviates from par, the redemption-bullion is to be corrected in proportion to the deviation, provided, however:—

(a) That no one shift in the weight of the redemption-bullion shall exceed the "brassage" (say 1 per cent.) or such stated limits (e.g., 1 per cent. per quarter) as will safeguard the Government from injurious speculations, and

(b) That the redemption-bullion shall in no case be of less weight than the sovereign.

(3) The Government to be responsible at all times for redeeming on demand gold coins in redemption-bullion and for minting bullion at the same rate (except for the "brassage" of, say, 1 per cent.), in other words, the Government must always be ready to sell gold bullion at the redemption-price, and to buy it at the mint-price (the redemption-price less the "brassage").

The following diagram shows approximately what would have been the effect of the system on the price level if it had been adopted in the United States in 1907. There are reasons why, in practice, the price level would have followed an even more uniform course.



The proposal is in mechanism almost identical with the gold exchange device—the innovation introduced by Great Britain to maintain the Indian currency at par with gold.

No space remains in which to answer possible objections. It must suffice to refer the reader to the fuller statement appearing next year, to which allusion is made at the beginning of this article.

IRVING FISHER

REVIEWS

The Economic Outlook. By EDWIN CANNAN. (London: Fisher Unwin. 1912. Pp. 312.)

IF a Journal should not review its own back numbers, about a third of Professor Cannan's volume of selected essays, "the flotsam and jetsam of nearly a quarter of a century," falls out of one's purview. But the JOURNAL owes him an apology for a misprint that he records on p. 164. He was discussing municipal water, and it printed "good-will," when it should have printed "good well." Possibly he was too concrete for us, and we insisted that if he would not use technical economic terms, at least he should use a semi-technical term borrowed from business. The trivial incident is perhaps symbolic. Professor Cannan has no patience with "the great class which most erroneously believes that the only useful political economy is that which is difficult to understand," and he will be concrete at all costs. This blessed habit of his saves time and makes one wish to have studied just a little at the London School. And he pricks bubbles so neatly; thus: "I have seen an enthusiast for municipal housing stand in the empty streets of a town late at night, when every soul in the town was evidently housed, and say in a tone of conviction, 'Private enterprise has failed.'" Or thus (the passage was written in 1903): "The gratification which every patriot ought to feel at the fact that the comparatively well-paid 'miscellaneous' occupations are growing rapidly . . . will not be seriously damped by *The Times'* Economist's apparent belief that a City policeman is a poor thing compared with an Essex labourer or a South Staffordshire ironworker—a belief which he supports only by an obscure reference to an economic doctrine which was quite successfully exploded by McCulloch in the second quarter of last century."

SEVERAL of the essays that were not printed in this JOURNAL are old friends. The one from which the last quotation is taken appeared in the *Independent Review*. Another was read at the British Association, another printed in the *Quarterly Journal of*

Economics, and so on. They do nearly all, as the Preface claims, "bear in some way or other upon the direction in which we may expect progress in economic organisation to take place"; though I am not sure that this covers No. 2, "Ricardo in Parliament." Of the three not before printed, one was read to the Fabian Society in 1889 and another was to have been read at Ruskin Hall the day the students struck for more Socialistic teaching in 1909. They are both admirable of their kind. In the Autobiographical Introduction we learn that, on the MS. of the first, Professor Cannan finds that he pencilled three and twenty years ago: "Webb thinks he knows. So do I." The gloss probably still holds true.

Everyone knows that Professor Cannan—siding with "the ordinary person who has not been infected by the sterility of economic text-books"—regrets that, in the theory of distribution, too much stress has often been laid on distribution among "factors" and not enough on distribution among families. To him "the two greatest ends of economic inquiry" are "the furnishing of general answers to the two questions, first, why whole communities are rich or poor, and secondly, why inside each community some individuals and families are above and others below the average in wealth." Perhaps he was rather more lonely in his adhesion to this view twenty years ago than he is now. Few, I hope, would care to dispute it. But it remains true that, so far, acceptance has not greatly influenced the formal outline of English economic teaching and economic text-books. All allow, for example, that variations in property are as important as variations in wage, and yet I can think of no healthy literary child of a suggestion that Professor Cannan first printed seven years ago. "A great investigation might take place into the different effects of different laws as to inheritance and bequest, into the effect of the customs observed in regard to dowries, the effect of large and small families in different classes, and many other similar subjects which are just as fitted for discussion in works on economic theory as the matters at present usually discussed—for example, in relation to the causes of differences in wages in different occupations." If Professor Cannan is not going to do the work himself—as this reviewer most devoutly hopes he may—will no one else make a start?

The paper on Socialism and Nationalism, read at Ruskin Hall, like that on Economics and Socialism, read to the Fabians, is full of good things. They are among the most "outlooking" of the series. Mr. Cannan told the Fabians in '89 that "State

ownership of the means of production, but not of the means of enjoyment and income, is an utterly chimerical state of things." I do not know whether they believed him even after the crushing illustration: "What could be more abominable and absurd than to refuse to allow a man to build a toolshed for himself, and yet to allow him to accumulate, and possibly to bequeath, an unlimited number of racehorses, feather-beds, and billiard-tables." Mr. Cannan said the view that he criticised was characteristic of the older Socialism; but the blessed formula sticks about the neck of the newer as if there had never been a toolshed. Twenty years later Professor Cannan reminded Ruskin Hall that old countries owned much property outside their territory, and noted that "he did not remember seeing any statement as to what is to be done with this property if social reorganisation takes place on a national basis." Do you confiscate what falls within "Socialised" territory and force yourself thereby to become a self-sufficing unit, so far as capital is concerned *in secula seculorum*; or do you pay interest and sacrifice dogma? Worse still—one might add—if you have a superfluity, do you accept interest, or do you lend gratis to a "Socialised" Costa Rica in order not to exploit the Costa Ricans? The paper, one ought to say, is vastly less sympathetic towards Nationalism than towards Socialism; and an unfriendly critic might even suggest that its author had absorbed from Ricardo—see "Ricardo in Parliament"—such very radical views about national debts that he set about stirring up future Labour leaders to go for repudiation. I, however, am not that critic.

On the near future—see the last article, hitherto unpublished, as well as the Introduction—Professor Cannan looks out with a cheerful and reasoned confidence. The arguments are not, and do not pretend to be, all new. Even if each were a stale commonplace they would make delightful reading. It would be unfair to Professor Cannan to quote the whole of his narrative of the probable course of a general strike, whereby he proves it a bogey. It is to be found on p. 49 of the Introduction, and it is very far from dismal. The Introduction closes with a prophecy of more "labour troubles," and an exhortation to face them "with a cool head . . . and unfailing good temper. It is childish to be angry with everyone who will not pay you what you ask, and with everyone who will not work for what you offer; and childish anger ends in tears." If we all wrote like Professor Cannan what a companionable science economics would be. Perhaps he may yet persuade some unbeliever that it is not all *Katallactics* and the *Calculus*.

J. H. CLAPHAM

Syndicalism and Labour. Notes upon some Aspects of Social and Industrial Questions of the Day. By SIR ARTHUR CLAY, Bart. Fourth edition, abridged. (London : Murray. 1912. Pp. xv+166. Price 1s. net.)

Syndicalism : a Critical Examination. By J. RAMSAY MACDONALD. (London : Constable and Co. 1912. Pp. vii+74.)

SIR ARTHUR CLAY'S book is the fourth and abridged edition of his *Syndicalism and Labour*, first published in August, 1911. That by Mr. Ramsay Macdonald is based upon six articles on Syndicalism which appeared in the *Daily Chronicle* during May, 1912. The two books, of course, have certain points in common : e.g., they both discuss the general strike, they both contain some account of the writings of M. Sorel, and they both have a good deal to say about the relation of Syndicalism to Socialism and to trade unionism. But they approach the subject of Syndicalism from very different points of view, and the differences between the two books are much more noticeable than their resemblances.

Mr. Macdonald thinks that "even in France . . . Syndicalism as a policy is absurdly weak and is not making progress" (p. 35), that it has taken little hold in the other European countries, and that it is weakening in America ; while Syndicalism in England he regards as "negligible, both as a school of thought and as an organisation for action" (p. 39). "No one," he says, "would have troubled very much about it had not the sanguinary flavour of the word Syndicalism been necessary as an ingredient for the repulsive mixture of licence and absurdity which is placed by unscrupulous persons before the public day by day in order to disgust it against everything which concerns Labour and Socialism" (p. 42).

Sir Arthur Clay, on the other hand, is very much alarmed at the progress which he thinks Syndicalism is making, not only on the Continent, but in England. He sees the hand of the Syndicalist at work in recent strikes, which have "made it clear that the object of a general strike in this country is not primarily economical, but political ; that it is a declaration of war by wage-earners, not, except indirectly, against their employers, but against the whole of the community outside the ranks of the belligerent unions, and that its use as a means of waging industrial war is incompatible with national security" (p. ix). He thinks that Syndicalism, if properly understood by British wage-earners, would be indignantly repudiated, but that there is some danger of their being led through ignorance of its doctrines to

adopt its methods. In Mr. Macdonald's opinion, however, Syndicalism "is as likely to dominate trade unionism as are the tenets of Johannah Southcote to become the established religion of England" (p. 61). He thinks, and we believe it to be the truer view, that the recent strikes have been merely the result of a swing of the pendulum from political to industrial methods as a means of settling questions between capital and labour, a phenomenon which has often been witnessed in the history of trade unionism. "The revival of trade union activity was erroneously identified with the Syndicalist movement, and what on the railways and in the mines has been merely a return to the methods of 1860-1890, is thought to be an embracing of a new revolutionary purpose. All that is happening in England at present is that trade unionism as an active force is reviving, and that industrial action is being resorted to with, perhaps, the over enthusiasm which always follows upon a period of over-neglect" (p. 45). The two authors are at one as to the futility of the general strike in bringing about revolutionary changes in social relations. But Sir Arthur Clay seems to think that the use of the general strike has always been proposed with the object of overthrowing society, and he also certainly gives the impression that he imagines the idea of the general strike to have originated with the Syndicalists, which is, of course, not the case. Mr. Macdonald points out that the weapon may be used not merely to bring about revolutionary changes, but also to secure either "some specific demand—say an extension of the franchise, the resignation of a Government, or the defeat of a war party; if used for political purposes, as it well may be; or increased wages or any other trade union claim if used only for industrial purposes" (p. 61), and in these cases, as he says, "it need not be unsuccessful" (p. 61).

Sir Arthur Clay's book really contains very little about Syndicalism, but it has a good deal to say upon various other subjects, which he seems to think are much more closely connected with it than is actually the case. If its author trembles at the idea of Syndicalism, he shudders at the bare thought of Socialism, and several chapters are devoted to a criticism of some of the proposals of Socialists. In several others he reproduces some well-known criticisms of trade union action, on the lines of the late Mr. T. S. Cree, whom he quotes with approval. The points he mentions have been thrashed out over and over again, and they do not appear to call for further comment here. The Osborne judgment is discussed and vigorously defended in Chapters vii., viii., and x., and in this connection Mr. and Mrs. Sidney Webb

fall very much under his displeasure in Chapter vii., which is a criticism of the introduction to the latest edition of their *History of Trade Unionism*. But to return to what Sir Arthur has to say about the Socialists. While recognising that there are fundamental differences between Socialists and Syndicalists, he, as it seems to us, fails to remember this when discussing their relations to each other, and he is inclined to lump together State Socialists, Communists, Syndicalists, and Anarchists under the head of "the enemies of society." The trade unions, in so far as they have been captured by the Socialists, also appear to be included; e.g., on p. 45 he says: "It must never be forgotten that, although the ultimate objects of the State Socialists, Communists, Syndicalists, and Anarchists differ fundamentally and are indeed mutually exclusive, and although they regard each other with hostility and contempt, they are, ^{for} consciously or unconsciously, acting in concert in attacking society, and in opposing all that hinders their operations. One object is common to all." And again, on the same page: "There is no hope . . . that the national danger from the forces of disorder will be lessened by the fundamental antagonism which exists between the doctrines of Collectivism, Syndicalism, and Anarchy, and we must be prepared to find these forces working in alliance for the destruction of society, as it is now organised." Mr. Macdonald also deals with the relation of Socialism to Syndicalism, and admits that "the fact that the Syndicalist founds his community on common property in the means of production used for common convenience and benefit, gives him, without being a Socialist, a right to stand on a small bit of the same ground as the Socialist" (p. 5). But he points out that "the Syndicalist . . . is poles asunder from the Socialist in method, and method counts for everything in the process of social change. . . . No one who has the least knowledge of Syndicalism on the one hand and of Socialism on the other can ever mix up the two. In fact, Syndicalism is largely a revolt against Socialism" (pp. 5, 6).

In order to prove that the Socialists are in alliance with the Syndicalists, Sir Arthur Clay endeavours to establish the proposition that the Socialists are opposed to conciliation in labour disputes, and the greater part of Chapter vi. is devoted to this object. We do not think he has made out his case, or that he has any reason for thinking that a policy of resistance to conciliation has been adopted by the Socialists, as he seems to suggest on p. 73 and elsewhere. Mr. Ramsay Macdonald is himself, as far as we know, not opposed to conciliation; while Mr. Philip Snowden, another very typical Socialist, is in favour of compul-

sory arbitration. In Chapter vi. Sir Arthur severely criticises Mr. Sidney Webb for speaking to the Amalgamated Society of Railway Servants unfavourably of the working of the Conciliation Boards set up in 1907. But he is surely hardly justified in concluding from this that Mr. Webb is opposed to the principle of conciliation.

According to Sir Arthur, new "forces . . . are driving the country nearer and nearer to the brink of the abyss" (p. ix); how is the country to be kept from slipping over the edge? In the first place, "free labour must be safeguarded by the whole force of the community" (p. viii); and secondly, encroachments on liberty must be stopped, and "the spirit of independence and enterprise upon which alone the advance of a community must depend" (p. 161) must be encouraged. But the bulwark on which Sir Arthur mainly relies for "safety from the attacks of the enemies of society is vigorous and well-concerted action by the middle and upper classes" (p. 148). It is on the great middle class, however, that he apparently places most reliance. But the great middle class is strangely apathetic, and some pages in Chapter xiii. are devoted to an inquiry into the causes of their apathy. It cannot be that their courage and energy have been sapped and weakened by long years of comfort and prosperity, for look at the energy they show in business and the readiness with which they responded to the call for their services during the Boer War. No; the middle classes are becoming too humane—some of their members actually having become Socialists themselves, and they have begun to believe in social reform, partly because they have become humane, and partly because they think social reform would help the particular political party to which they belong. They are, however, too ignorant to see that social reform is always a step in the direction of Socialism. Hence the apathy of which Sir Arthur complains.

His book is, as we have said, much more than a criticism of Syndicalism: in fact, it might almost have been entitled *The Case against the Labour Movement*. We do not think the author has put his case well, because he seems to us not fully to understand the position of some of those with whom he disagrees, and because, while no doubt he is well aware of the imperfections of the existing industrial system, and fully sympathises with those who suffer from them, he has not made this sufficiently apparent in his pages.

Mr. Ramsay Macdonald's book appears to us to be a very able little work, and we hope it will be widely read.

H. SANDERSON FURNISS

The Economic Principles of Confucius and his School. By CHEN HUAN-CHANG. Columbia University Studies. (New York : Longmans. 1911. 2 Vols. Pp. xv+756.)

CONFUCIUS once observed : "How numerous are the people!" Jan said, "Since they are thus numerous, what more shall be done for them?" "Enrich them," was the reply. "And when they have been enriched, what more shall be done?" Confucius said, "Instruct them." His theory of wages was expressed when he said : "By daily examinations and monthly trials, and by making their rations in accordance with their labours—this is the way to encourage all the classes of artisans." He did not allow land to be subject to private ownership. He did not think it wrong to take interest ; for capital is the mother, and interest is her child.¹ In the matter of tariffs he was an extreme free-trader.

This is the character of the *Economic Principles of Confucius*. They supply the pretext rather than the substance of Dr. Chen Huan-Chang's most interesting volumes. The substance is composed in part of contributions to the economic history of China, and in part of the poems and aphorisms of many generations on all topics that can be considered in the widest sense economic. His chapters are headed "Factors of Production," "Distribution," "Public Finance," and so forth ; but into this artificial scheme he has fitted a great deal that is charming and instructive. To prove that the separation of the two sexes was not the original plan in China, he is able to quote this (which Confucius gave as a bad example of a lewd custom) from the *Canon of Poetry* :—

The Tsin and the Wei
Now present their broad sheets of water.
Ladies and gentlemen
Are carrying flowers of valerian.
A lady says, "Shall we go to see?"
A gentleman replies, "I have already been."
"But let us go again to see.
Beyond the Wei
The ground is large and fit for pleasure."
So the gentlemen and ladies
Make sport together,
Presenting one another with small peonies.

In the chapter on "Economic Organisation" we read another poem from the *Canon*, directed against an official who makes his wife sew within the period of three months from marriage :—

¹ The Chinese word (*hsi*) for interest means "child." That interest is justifiable has never been doubted in China.

Shoes thinly woven of the dolichos fibre
 May be used to walk on the hoarfrost.
 The delicate fingers of a bride
 May be used in making clothes.
 Putting the waistband to his lower garment and the collar to his upper,
 The beautiful woman fixes them.
 The beautiful woman moved gracefully,
 And politely stood aside to the left ;
 From her girdle hung her ivory comb-pin.
 But it is the narrowmindedness of her husband,
 Which makes the subject for satire.

In the matter of the treatment of the old, Confucius laid it down that if women have no children at the age of fifty, they are to be given clothing and food by the government, and are to be appointed commissioners for the collection of poetry. This shows, according to Dr. Huan-Chang, that Confucius thought women qualified to hold government office. "Nourishing the old" was a special principle of Confucius. "According to the *Royal Regulations*, for those of fifty the grain is fine and different from that used by the younger people. For those of sixty, flesh is kept in store waiting for their order at any time. For those of seventy there is a second service of savoury meat. For those of eighty there is a constant supply of delicacies. For those of ninety, food and drink are never out of their chamber ; whenever they wander to another place, it is required that savoury meat and drink should accompany them."

When Dr. Huan-Chang is dealing with later philosophers and with economic history we find a method more like that of modern economists. His account of the *tsing tien* system of land tenure, which is supposed to have existed in some form or other from about 2600 B.C. to 350 B.C., is very full and interesting, and is worth the attention of all students of land tenure in village communities. The section on money, a matter in which China is now the least developed of all nations, shows that there are many practices, in the use of which she certainly preceded them. It is said that money has been used in China since 2900 B.C., and the trimetallic system of the present day has persisted (with a diminishing use of gold) from the remotest times, the copper coin being formerly, as now, the basis of the system. In the use of paper money they long anticipated other peoples. Chên Chung, who died in 83 A.D., says of the *li pu* that "it was a piece of cloth stamped with seals and written with words, two inches wide and two feet long. It was used as money for the exchange of things." The origin of something between notes and bills of exchange in the ninth century A.D. is worth

quoting : "During the middle part of the Tang dynasty there was a scarcity of money ; hence, money was not allowed to be taken out of certain localities. Therefore, when merchants came to the capital they deposited their money in the offices which represented the different provinces at the capital, and received bonds from them. In this way, wherever they went they drew money with their bonds very easily. This was called 'flying money.' Such a practice, however, was prohibited by the central government, because it was thought that the offices would keep the money out of circulation, and the prices of commodities would be lowered. But the result was still worse than before. Therefore, in 812 A.D., the government opened its own offices at the capital for carrying on the business of flying money—that is, the government issued bonds to depositors, and they exchanged bonds for money at the great cities of different provinces. A true government bank was established in 970 A.D. for the operation of the flying-money system. It was called The Bank of Convenient Money." Tradition says that the system of "money associations," or co-operative banks of China, was invented by a hermit named Mang Kung, who lived about 220 A.D.

Gresham's Law and the Quantity Theory have been long understood by Chinese scholars. In 175 B.C. Ch'ia Yi said : "The government accumulates copper for the control of the value of money. When the value is low, it lessens the quantity by some policy ; and when it is high, it distributes the money by some policy. Hence, the price of commodities must be equalised." In 1378 A.D. Yeh Tzū-ch'ī laid it down that "if we want to establish paper money, it is necessary to reserve cash as a fund. It should be like the certificate of tea or salt ; when the certificate is presented the tea or salt can be obtained immediately. . . . When the certificate comes, the cash goes out ; and when the certificate goes out, the cash comes in. Take the cash as the mother, and take the certificate as the son. The mother and son supplement each other, and control the price of all commodities. When the price is low, paper should be issued ; and when the price is high it should be withdrawn." In 1223 A.D. Yüan Hsieh explained that an insufficiency of copper money could not be remedied by issuing inferior iron money in addition—"if we now add the iron money to it, should not the copper money but become still less? Formerly, because the paper money was too much, the price of commodities was dear. If we now add the iron money to the market, would the price not become still dearer?"

There is a great deal in Dr. Huan-Chang's learned and delightful book from which one would like to quote—Confucius's principles of Eugenics, for example, the provisions for the mobility of labour, or the author's admirable history of Chinese taxation. We must be content with one more topic only—the question of population in China. Statistics of population exist from the very earliest times. "To anyone bearing the tables of population Confucius bowed forward to the crossbar of his carriage." But they are very inaccurate, mainly because there have been at various times a 'door-tax' and a 'mouth-tax,' which have made it to the interest of the people to conceal their numbers. Allowance for this, however, being made and account being taken of the conditions presumed by the systems of land tenure, it seems fairly clear that the present huge population of China is of quite modern growth, and that great density of population is as recent a thing in China as it is in England. During the first seventeen centuries of the Christian era (or from the fifth to the twenty-second of the Confucian) the population appears to have fluctuated in the neighbourhood of 50,000,000; it is not likely that it ever reached 100,000,000 before the beginning of the eighteenth century A.D. It is since that time that the numbers have increased by leaps and bounds. According to the comparatively accurate censuses of recent times, the population was 177,000,000 in 1749, 284,000,000 in 1783, and 413,000,000 in 1842. During the T'ai-p'ing rebellion (1850–1856) the loss of life is said to have been from 10,000,000 to 20,000,000 (Dr. Huan-Chang places the loss from this cause at 150,000,000, but this must be due to a misprint or a rhetorical exaggeration); and there has been more loss, perhaps, in quite recent times than formerly from floods and famine. Between 1868 and 1885 the official estimates of population varied from 378,000,000 to 405,000,000. For 1910 (according to *The China Year Book*) two independent estimates are available (Tibet and Manchuria being excluded)—the Custom's Estimate of 421,000,000 and the Minchengpu (Ministry of the Interior) Census Return, based on the number of households, of 316,000,000. The doubt attaching to these figures is shown by the fact that the population of Szechuan is put, on the basis of the Minchengpu Census, at 23,000,000, by the Customs at 79,000,000, and by Sir A. Hosie, who estimated it in 1904, at 45,000,000. It is probably true, however, that, whereas before the year 1700 the population of China proper did not exceed 100,000,000, it has been for the last century, and is now, somewhere between 300,000,000 and 400,000,000. It is not correct, therefore, to think, as perhaps

one is apt to, that the pressure of population in China on the means of subsistence is many centuries old. The position is comparatively new, and there has been no obvious change, as there has been in the Western World, in economic or natural conditions of such a kind as to justify this enormous increase of population. The Golden Age of China, the age of her philosophers and poets and of discoveries in the arts of government and of life, was not an age of teeming and overcrowded population. Moralists are fond of regarding periods of declining population as periods of national decay. In China, as elsewhere, the forces of religion have been powerfully on the side of numerous offspring. But it is difficult to believe that the Golden Age can be recovered while those to enjoy it are so many.

Dr. Huan-Chang, however, seeks for the chief cause of the weakness of China elsewhere. He sees it in the requirement of the "modern essay" in civil-service examinations (Class I). The modern essay was of no practical use, and its mastery required long practice. Instituted in 1370, in 1902 it was abolished.

J. M. KEYNES

Railway Transportation: A History of its Economics and of its Relation to the State. By CHARLES LEE RAPER, Professor of Economics, University of North Carolina. (New York and London: Putnams, 1912. Pp. xii+331. Price 6s.)

PROFESSOR RAPER states on his title-page that his book is based, with the author's permission, upon President Hadley's *Railroad Transportation: Its History and its Laws*, "a work," as he truly says in the preface, "so admirable that it deserves to live as long as railways are the subject of serious study." He adds that his own work "is a new book . . . and its chief purpose is to revise and enlarge Hadley's book." The preface continues: "In all cases of facts, the effort has been made to ascertain the most reliable ones. . . . Personal observations, which cover, with fair completeness, the conditions of the lines and equipment, the methods of operation, and the general characteristics of the traffic, have been made in all the countries that come under treatment." Reluctantly we are compelled, after carefully perusing the book, to say that the effort to ascertain the most reliable facts has not been successful; and that, had it not been for the assurance of the author that he has observed in person the actual working of the railways in the different countries, we should have imagined that the book had been composed throughout in the

seclusion of a library. The charge of inaccuracy is a serious one, and it is only right to support it by evidence.

Dealing with Great Britain, Prof. Raper states that the Joint Committee of 1872 on Railway Amalgamation found that "there was really no effective competition between the parallel lines of railway." In fact, the Committee reported that, while there was no direct competition in rates, there was a very real competition in facilities. On p. 27 he states: "The canals of England and Wales carried 33,000 tons of coal in 1852, only 7,900 in 1882, while for the same period the coal tonnage of the English railways increased from 317,000 to 6,546,000." How these figures got into the text we are at a loss to imagine. That no one of the four sets has any relation to the actual facts is so obvious that it is not worth while to hunt up the actual statistics. On p. 29 Prof. Raper states, accurately we have no doubt, that if we take the year 1900 as typical, the *per capita* trips in the United Kingdom were 27 in number. He goes on: "The Briton, in our year of comparison, travelled on an average about 245 miles." Of course, this is a mere guess. Neither the author nor anybody else knows the length of the average passenger journey in this country; indeed, two pages further on Prof. Raper states that "the British railways do not make compilations of passenger- or ton-mile statistics . . . the passenger-mile and the ton-mile units are not given or even kept on the books of the railways." His average travel of 245 miles can, therefore, only be a deduction from the figures of the average fare paid per journey at an assumed rate per mile. On p. 24 he states: "The actual average [fare per mile] has been perhaps as low as 1.75 to 2 cents." Now this rate, which we may assume he has employed, can be shown to demonstration to be very wide of the real facts. In the first place, we have some actual figures, not very much, but still valuable as indications. On four occasions actual passenger-mile receipts have been worked out for short periods in the United Kingdom. The North Eastern has published two compilations for specimen months, and two Irish railways, the Belfast and Northern Counties, and the Great Northern, gave some evidence from actual figures to the recent Viceregal Commission. All four go to show that the average fare in the United Kingdom is probably somewhere between 0.5d. and 0.6d., *i.e.*, between 1 and 1.2 cents. The *a priori* probability of this can be shown in another way. In France, where actual figures exist, the normal third-class fare is 4.92 centimes per kilometre; the actual average fare paid is only 3.56 for all classes—a reduction

of 30 per cent. If, therefore, in France the average rate per mile per passenger in all classes is 30 per cent. lower than the normal rate for third-class passengers only, it is quite reasonable to assume that in England, where a much larger percentage of the total travel is third-class, and where special fares are unquestionably issued both more freely and at greater reductions from the full rates, the average fare actually received by the railways is 40 per cent. below the standard of ordinary penny per mile third-class fares. If, then, the average fare is 0.6d. = 1.2 cents, that is, barely two-thirds of Prof. Raper's assumed average, we must make a corresponding correction on his average distance travelled, and substitute for 245 miles about 370.

Dealing with quite a different subject, on p. 39, Prof. Raper says the new statutory "classifications and maximum rates went into effect on the first of the year 1893. . . In the new classification and maxima, a number of commodities were not specially mentioned; and upon these the railways at once advanced their rates over the old ones, some of which had not been changed for many years." This is an entire misconception of what happened. The new classification was exhaustive; maxima were fixed in all cases, and the railways made no attempt to evade them. What they did do (and it was entirely within their statutory powers) was to delay the re-issue of the old special rates, much below the statutory maxima, for two-ton or four-ton lots, and thereby to subject the wholesale traffic of the country to the rates previously applied only to retail consignments.

Again, on yet another subject, Prof. Raper says: "The general form of charters for railways was prescribed in 1845. Prior to this date, the charters had been granted as special Acts." The fact, of course, is that from the beginning of things down to the present day no railway company has ever come into existence without a special Act (or, in the case of light railways since 1896, of a special order of the Commissioners, confirmed by the Board of Trade, and having the effect of a special Act). What happened in 1845 was that bundles of clauses—referring respectively (1) to the constitution and powers of the company as a company, (2) to the rights and obligations of the company as owning and working a railway undertaking, and (3) to the legal position in reference to taking and holding of land, which hitherto had been enacted at full length in each company's special Act—were passed as general Acts; and that it was provided that these general Acts should be incorporated into and read as a portion of each company's special Act. But it was also provided that the

special Act (or, as Prof. Raper, following American custom, calls it, the Charter) of each new company might vary or except any of the provisions of the general Acts. And it is safe to say that a special Act, incorporating a new railway company or extending the powers of an old one, hardly ever passes through Parliament without varying or excepting provisions of the normal code.

On the same page, 46, the author contrasts the control which came through Charters with the regulation by Parliamentary statutes. We cannot make out whether Prof. Raper thinks that the Charters are granted by some authority other than Parliament, or whether he is merely using inaccurate language to distinguish between private Acts—or, as the House of Lords calls them, local and personal Acts—and public general Acts. Indeed, the author constantly does himself injustice by the use of curiously loose language: as, for instance, on p. 45, where he says, "in the United Kingdom, excepting a few local cases in Ireland, there has been no State building or management." This would imply that in Ireland there has been both State building and management. Of course, there has been neither. The State has in many cases made to private companies considerable grants towards the expenses of building. And in some cases, in making the grant, it has so far interfered with the future management by the company as to stipulate for a minimum number of trains, or for certain special rights of interference by the Irish Privy Council, or by the Board of Works, or by representatives of the local authorities.

Prof. Raper is not infrequently inconsistent with himself. On p. 43 he asserts categorically that "the actual [British] freight rates are not much less than the maxima." On the previous page we read: "Much of the British freight moves, not at the standard-class rates, but at special commodity rates, which are materially lower than the class charges. . . . Perhaps as much as 75 per cent. of the British traffic is hauled at these special rates." Now, as the standard class-rates are at least not higher than the maxima, if three-quarters of the traffic moves at rates which are materially lower, we leave it to Prof. Raper to explain how the average actual rates can be not much less than the maxima. On p. 57 we read, "The new maxima [of 1891 and 1892] established standards for all class rates beyond which any rate would be *prima facie* unreasonable and illegal"; half a dozen lines lower down, "The maxima were an absolute limit." We can only reconcile the contradiction by supposing that Prof. Raper regards *prima facie* as equivalent to *ipso facto*. And other instances of

inconsistency could be cited. We leave unnoticed numerous other points relating to English railways which we had marked for criticism.

The same looseness and inaccuracy characterises the book when it comes to deal with other countries than Great Britain. The description of the French rates and classification on p. 90 seems to us quite misleading to anyone approaching the subject from the outside. The tables of "fast-speed" (*Grande Vitesse*) traffic are placed in a prominent position, and it is not explained that only an insignificant fraction of the total traffic is carried under them. We are unable to understand Prof. Raper's economic geography. On p. 94, he says that "though French coal is needed in the Northern lowlands to compete with the English, and though considerable quantities of Southern wine could be profitably sold in Northern France, the railway rates for such distances have been too high for their transportation." We have heard of carrying coals to Newcastle, but not hitherto of the need to import them into the *Pas de Calais*! If Professor Raper will look at the accounts of the *Orléans Railway*, and note the drop in the receipts in consequence of the failure of the vintage in 1910, he will, we think, change his views as to the impossibility of carrying wine (when there is wine to carry) by railway from South to North. Turning from France, Professor Raper comes to Italy. "The Conventions of 1885," he says, "provided for a practical monopoly of each of the three companies. Their lines were not to have any important overlapping, and, where this existed, the competitors were to form a working agreement." We have read this statement with blank astonishment. It has always hitherto been understood that the essence of the *Depretis* scheme was exactly the opposite.

"All the countries that have as yet assumed the management of railways," says Professor Raper on p. 283, "have in theory adopted the principle of maximum profits." This is certainly not the case. And, indeed, he himself makes quite a different statement eight pages further on: "In pursuing this policy of low rates, the Belgian Government has perhaps made its income from railway management subservient to the gain which has come indirectly through a large volume of shipping. The development of Belgian industries and commerce, rather than the making of expenses or profits, has perhaps during the last forty years been the method of operation deliberately chosen by the State." The Ministers responsible for the railways of Australasia have always claimed their policy to be to give the minimum rates

and the maximum facilities consistent with their railways earning just enough to cover the actual interest on the railway debt. This policy will be found set forth and justified in the evidence of Sir Joseph Ward, ex-Prime Minister of New Zealand, in his evidence before the recent Viceregal Commission on Irish Railways.

A large part of Professor Raper's book deals, as is only natural, with the United States. But even on his own ground we do not think he is a trustworthy guide. For instance, dealing with the great systems into which the railways of the United States have of recent years crystallised, Professor Raper writes on p. 187: "There have been many thousands of owners of the capital of each of these groups, but the controlling personalities have for a few years been those who hold large stock in the systems known as the Vanderbilt, the Pennsylvania, the Morgan, the Hill, the Harriman, the Gould, and the Moore." Now it is perfectly well known that no outside interests control, or ever have controlled, the Pennsylvania Railroad. We should ourselves have thought that it was important to bring out the fact that one system at least, the largest and most powerful of all—and surely the Newhaven is another instance—never has submitted to the domination of Wall Street, but has been managed throughout by a body of directors freely elected by the shareholders, of whom (be it added) there are now 70,000. It is, indeed, a quite open secret that the late President of the Pennsylvania, Mr. Cassatt, added at one stroke \$100,000,000 to the common stock of the company with the deliberate intention of making the stock so large that purchase for control would be too big an operation even for Wall Street to contemplate.

On p. 225 Professor Raper states that "the railways of the United States had, in 1907, a ton-mileage approximately six times that of the British." Ignoring the point already made that the English ton-mileage can only be guessed at, we may note that the author himself gives the American ton-mileage as 236,000,000,000. We know from official figures that the tonnage hauled in England was in 1907 515,000,000 tons. On p. 44, he states that the length of haul in Great Britain is "an average of from 31 to 50 miles." Let us call it 40; we shall then have the ton-mileage on British railways as equal to 20,600,000,000. On his own figures, therefore, the English ton-mileage is not approximately one-sixth, but approximately one-eleventh of the American. We may here note an interesting and not generally known fact. Assuming for the moment that the English ton-mile figures represent something like the real fact (for our own part we believe them

to be much overstated, as our own guess is that the average haul is under thirty miles), it is evident that the average mile of railway in the United Kingdom carries no more freight traffic than the average mile in the United States; for the ton-mileage is, as we have seen, in the ratio of 1 to 11, and the ratio of miles open is almost exactly the same. And, indeed, the average mile of running line carries less; for per mile of line open we have a much higher proportion of double track than they have in America. The common belief, therefore, which Professor Raper voices when he speaks of the traffic of English railways as "dense," is not justified by facts, if we are thinking, that is, in terms of tonnage. In terms of number of trains, the ratio is, of course, entirely different.

But we forbear from following Professor Raper further. We have given reasons enough for the belief that his book is, like the Apocrypha, "not to be taken as establishing any doctrine." We regret that it should be so, for the design on which the book is written is good, and Hadley badly needs bringing up to date. But it is not given to everyone to bend the bow of Ulysses.

W. M. ACWORTH

Combination among Railway Companies. By W. A. ROBERTSON. Studies in Economics and Political Science Series. (Constable and Co. Pp. 105.)

THIS book is one of the series of monographs by writers connected with the London School of Economics and Political Science. It is based on a short course of lectures delivered to railway students last winter, and it is a matter for regret that the lecture form has been retained. The reader is, in consequence, frequently confronted with such phrases as "as I said in my last lecture," whilst he himself is totally unconscious when the last lecture began or ended. Further, Mr. Robertson here and there makes statements of fact with the words "I think" appended. These words give the unfortunate impression that Mr. Robertson has neglected to verify the facts, an impression the writer believes to be wholly false.

In other respects the monograph is excellent. The history, the forms of combination allowable by law, the effects on the combining companies, on outside companies, and, finally, on the public, are all set out and discussed in a most lucid manner. The information given is just what a student, other than a law student, ought to know. Technical law terms have been avoided as far

as could be, and everything possible has been done to make the book suitable for the non-railwayman without sacrificing its value for the railway student.

One rather common error Mr. Robertson has fallen into. The Railway Clearing House he dates from 1847, whereas it began work on January 2nd, 1842. In view of Mr. Gladstone's Committee of 1844, the House of Commons Committee of 1846, and 1846 being the year in which several of the large railway companies first took form, the date is of considerable importance. The influence of the Clearing House on the events of 1844-47 was no doubt considerable.

W. TETLEY STEPHENSON

The Course of Prices in New Zealand. By JAMES W. MCLLRAITH. (Wellington: Government Printing Office. 1911. Pp. 112.)

Report of Commission on the Cost of Living in New Zealand, together with Minutes of Proceedings and Evidence. (Wellington: Government Printing Office. 1912. Pp. cxxxvi + 510.)

DR. MCLLRAITH'S essay, to which Professor Hight contributes an introduction, embodies the results of post-graduate research at Canterbury College. It shows a quite unusual combination of sound theoretical thinking with practical skill in handling statistical material. Since the time of Jevons there have been few pieces of private investigation into price levels carried out without official assistance more admirably than this one.

The chief object of the essay is to form an index number of New Zealand prices since 1860. But it also contains a good deal of general material relating to the economic history of the country, and some discussion of the causes underlying local price changes. After a full discussion of the principles of construction of index numbers, Dr. McLlraith has adopted a method which he summarises as follows: "I have used forty-five articles, including raw products as well as manufactured goods; and of these articles I have taken the unweighted arithmetical prices. My standard period is the decade 1890-99. I have also, for the sake of comparison, made use of the average obtained by the median; and in a few cases I have weighted the principal articles. The prices used are wholesale prices." In the choice of commodities he has, of course, been much limited by the difficulties of obtaining, especially for the earlier years, reasonably accurate statistics. As an illustration of these the case of mutton may be quoted. The

farmer and the meat-exporter were unable to say what mutton was actually worth in any particular year. "The farmer puts his sheep, when fat, into the saleyards, and there they are sold at so much per head. This price is determined partly by the current price ruling for mutton in the London market, and partly by the current price of tallow, hides, leather, and wool. The matter is further complicated by the fact that the amount of wool on the sheep depends upon the season at which they are sold. Sheep will, other things being equal, advance in price from January, shortly after shearing, till November, shortly before shearing." Since better statistics are progressively available as time goes on, Dr. McIlraith's task would have been rendered much easier by the systematic adoption of Dr. Marshall's step-by-step method. He does not discuss this device, and it may have escaped his attention.

If decade averages be taken, New Zealand prices are found to have fallen heavily and continuously from 1861-70, for which years the index number stands at 181, until 1892-1901, for which it stands at 98. Since that time prices have been almost stationary, with a slight tendency to rise, and for the decade 1901-1910 the index number stands at 101. If farm products are distinguished from non-farm products, some interesting results are noticeable. Up to the decade 1890-99 there are no important differences between the price movements of the two groups. Since that time the index number for farm products has risen from 100 to 123 in the decade 1902-11, while the index number for non-farm products has fallen during the same period from 100 to 94.

The Commission on the Cost of Living in New Zealand assembled on the 31st May, 1912, and reported on the 30th August. Within this brief space of time, however, they contrived to examine a great number of witnesses from all classes and to collect enough material to fill 650 folio pages. The volume contains a good deal that is interesting to the student of the economic development of new countries, as well as to the student of price changes. The Commission made free use of Dr. McIlraith's inquiries, and on the pure question of prices have not very much to add to them. Their general conclusion is that there has been an increased "cost of living" of at least 16 per cent. between the middle and late 'nineties and the present day, but that the general level of prices since 1890 has risen less in New Zealand than in any other country for which they were able to make comparisons. General money wages, on the other hand,

have risen 24 per cent. since 1896, so that there has been a steady tendency of real wages to rise.

The Report of the Commission is strongly adverse to the tariff-protection of industries. They have drawn up a very instructive table showing that in spite of a tariff varying on numerous articles from 20 to 25 per cent., not more than 21,277 workers altogether are employed in State-protected industries, or allowing for their dependants, about 5 per cent. of the population, and that in many of the highly protected industries a mere handful of workers are affected. A 20 per cent. duty on cutlery, for example, is accompanied by the employment of three persons on cutlery throughout New Zealand; a similar duty on glass is accompanied by the employment of fourteen persons. The comparative advantage which New Zealand possesses in pastoral pursuits is so overwhelming that the *additional* employment on industrial occupations brought about by the tariff is insignificant. It is also the case, of course, that the population of New Zealand is insufficient to support industries in which the economies of very large-scale production are important. The Commission, however, regard the vested interests which have grown up as sufficiently important to render a total abolition of the tariff inadvisable. They recommend a moderate revision downwards together with an abstention from new duties in the future, and express their preference for a system of bounties over one of tariffs. How far they have also been influenced by the difficulty of finding alternative sources of revenue does not appear.

Another of the Committee's recommendations has interest. They discern "a close connection between education and the cost of living," and they recommend on the one side more attention to technical instruction, and on the other, a more widely-spread acquaintance with economic fact and theory. "Most important of all is the character of the general education given in the primary schools: first, because it is given at the most impressionable age, and secondly, because the great majority of the people never receive any other formal education. It is therefore a matter of regret that at this stage more attention is not devoted to a description of the chief facts of social and economic life. In our system of government we proceed on the assumption that every adult man and woman is an expert in politics, and political questions are and must ever become more and more economic; but we make no provision to ensure that the assumption shall be founded on fact. In the primary and secondary schools a more prominent position should be given to non-contentious economics.

Children should be taught, *e.g.*, to understand and describe the industries of their district, the way in which the work is divided up and performed, the reasons why such industries are followed, why certain prices are paid, and the chief features of local government." The study would be carried further at the University, and an intelligent interest in the subject thus developed throughout the nation.

The Commission has been able to unmask the working of a curious and interesting "ring," known as the Merchants' Association of New Zealand, chiefly composed, apparently, of retail grocers. The Association refused to give evidence before the Commission; but the latter claim that they have "definite proof that the members of this Association have banded together for the purpose of restraining trade in their own interests, and boycotting independent traders. Where they have succeeded in securing control of imported and locally-produced commodities, their operations have been followed by increased prices. . . . The Merchants' Association are bringing constant pressure to bear upon local, British, and foreign suppliers to refuse supplies to independent traders who refuse to join the 'ring.'" Although the activities of the Association would seem to be detrimental to the interests of the wholesale manufacturers, the following are amongst the articles over which they have established control: sugar, matches, cocoa, Keiller's marmalade, Colman's mustard and starch, Keen's spice and blue, Robinson's groats and barley, Neave's food, Mellin's food, Edmond's baking-powder, Lever's soaps, Reckitt's polishes, candles, proprietary teas, tobacco and cigarettes. As an illustration of the methods of the Association the Commission print a most interesting correspondence placed at their disposal by the proprietors of Jeyes' fluid, who, in spite of pressure, have refused to boycott independent traders.

J. M. KEYNES

Income Taxation: Methods and Results in various Countries.

By KOSSUTH KENT KENNAN. (Milwaukee, Wisconsin: Burdick and Allen. 1911. Pp. 347. \$3.50.)

THIS work presents the salient facts of some forty systems of income taxation, making accessible to all legislators, students, and business men interested in the subject upon the practical side, a great mass of information that has hitherto been hidden in official documents or kept from them by the barriers of language. The fact that its scope is so wide and that it breaks so much new ground renders it a work of considerable value. It is supplemental

to Dr. Seligman's *Income Tax* (which deals with the half-dozen leading systems only), and far less exhaustive in the same field; but it is wider and much more detailed than Dr. Lauterbach's *Die Staats- und Kommunal-Besteuerung*, which covers very briefly Germany, Britain, and the British Colonies; while Willgren's work (in Swedish), reviewed in the last issue of this JOURNAL, treats the European systems only.

Speaking generally, the book is a compilation rather than a treatise. After a preliminary chapter on Definitions, the arrangement is alphabetical, seven systems being grouped under Australasia, while England, France, minor German States, and Prussia have a chapter each, and all the others through this plan fall into fortuitous groups. Four chapters are given to problems of the United States. The amount of space devoted to some of the countries is necessarily small, and in places seems to be conditioned more by the amplitude of the sources than by relative importance or interest. In consequence, the work takes on a somewhat statistical aspect. But the information conveyed in a condensed form is surprisingly complete, and, as a minimum, comprises in each case the rates of tax, details of exemption, of abatement and features of differentiation, total yield, proportion of yield to total tax revenue and to total revenue, and, where available, the cost of collection. The rates of tax are often very complicated, and to have them rendered both into a uniform currency and into percentages is of the greatest assistance to the reader. This information is, on the whole, very accurately given, but as the writer was under the disadvantage of dealing with a vast subject-matter the parts of which are in constant movement, it should not be relied upon as actually correct between the date of reference that is always carefully shown and the date of publication of the book. For example, taking consecutive pages, 47 to 51: in British Columbia the rates ranging from $1\frac{1}{2}$ per cent. (on incomes from \$1,000 to \$2,000) to 1 per cent. (for income in excess of \$7,000) have been reduced to 1 per cent. ranging to $2\frac{1}{2}$ per cent.; in Ontario the exemption limit for personal earnings, &c., has been raised from \$1,000 to \$1,200 (persons resident), and from \$700 to \$900 for outsiders; while in the Cape the original exemption limit, £1,000, was subsequently lowered considerably, and the fate of the tax at the Union of South Africa is not mentioned.

In a work of this character it is always interesting to "see ourselves as others see us." In view of the great changes which have recently taken place in our system, Mr. Kennan relies

perhaps a little too much on Dr. Hill's well-known essay for his broad generalisations. It is certainly no longer correct to put forward as an "advantage" the statement that, "By division of income into separate schedules, assessed to a considerable extent, by different officials, complete knowledge of one's financial condition is not obtained by any one assessor"; nor has the tax all its old elasticity by simple alteration of the rate when the relative positions of unearned and earned incomes have to be maintained. It is hardly legitimate to contrast the yield in 1815 (as three times that of a quarter of a century later and "half" the present yield) with the fact that the population and wealth of the country have quadrupled since that date, and to style the contrast as "remarkable," if no reference is made to rate of tax or exemptions! Moreover, the present yield is practically *three* times that of 1815. There are several unimportant slips; we may mention that the Additional and Special Commissioners are in no sense "under" the General Commissioners, while the footnote on p. 72 correcting the figures of Mr. Pepper's report is wrong, that report being quite in order.

The chapter upon Prussia, otherwise an excellent summary of a complex system, is marred by the absence of a clear account of the position of dividends from companies in relation to the individual income, and the chapter on the Minor German States should have dealt with the very elaborate and important provisions made for avoiding double taxation. In the former case the maximum limit of income entitled to special consideration (for prolonged sickness, impecunious relatives, &c.) is given as £475, but it has been raised to £625. Mr. Kennan does well to dispel the somewhat prevalent notions as to the excellence of the Swiss systems. Yet if the reader is likely to generalise from the description of personal experience in Basle, Switzerland will receive more than justice, for that system is undoubtedly the best in the country. If details from Zurich and other places had been extensively given, a much more drastic summary would have been justified. Moreover, he almost fails to mention the prevalence of the communal tax, which is of paramount importance since it vitally (and viciously) conditions the Cantonal results. He preserves his presence of mind admirably before the 1446 grades of Sweden!

The United States history and present problems are adequately treated. We turn with interest to the summary to ascertain what broad features the new synthesis has revealed. When so much has been given, it would be ungracious to complain, and

Mr. Kennan has expressly disclaimed complete investigation and scientific treatment. Anyone who hopes to get help upon the modern problems of income taxation, such as domicile, wasting assets, the faculty of the family, or double taxation and divided profits, may be disappointed, as the results are not summarised, and the index is inadequate to facilitate picking up the threads here and there through the book. But an exceedingly valuable piece of work has been accomplished with reference to rates of tax. At enormous labour, the amounts payable at the different levels of income for forty systems have been computed, reduced to a common percentage basis, and combined in an average percentage graph. The curve shows the progression as follows: 2 per cent. at \$1,000, 3 per cent. at \$5,000, 3.6 per cent. at \$25,000, 3.8 per cent. at \$50,000, and thereafter it is practically proportional. Another graph gives three curves, the United States war tax, the average of the "Continental group," and the average of the "English group" (Britain and the Colonies); the first is, roughly, 2 per cent. higher than the second throughout, and the second is 0.6 per cent. higher than the last from £1,000 income to £5,000, increasing thereafter to a constant difference of 0.8 per cent., the "English" group being about 3.2 per cent., and the "Continental" just over 4 per cent. The curves refer, in all the countries, to "earned" incomes, and do not include local "supplements." It would be an advantage if these graphs were given on a larger scale (to show the details better for the lower incomes), the considerable parts running parallel being omitted, as these facts could be equally well conveyed in a footnote. McCulloch, who felt that embarking upon progression in taxation was to be "at sea without rudder and compass," might now have at any rate a plan of the route followed by many others without shipwreck, and consent to be taken in tow!

It is to be hoped that the work will be kept up to date with further editions—it is one that every reference library should possess.

J. C. STAMP

Zur Geschichte der englischen und amerikanischen Vermögenssteuer. By Dr. BRUNO MOLL. (Leipzig: Duncker u. Humblot. 1912. Price 3 marks.)

THIS work of a hundred pages is in two parts—I, a critical review of the history of taxation in England, and II, a history of the property-tax in the older States of the North American Union to the middle of the nineteenth century. Dr. Bruno Moll

is a *privat-dozent* at the University of Kiel, and appears to have studied the history of our taxation minutely; for there are evidences that he has used with great diligence all the authorities which the British Museum and other resources contain. He is to be congratulated on the useful work accomplished.

In the first portion of the work, the English history, he has an introductory chapter, followed by another on the rent principle and the capital principle in English taxation. Then we have an introduction to the land-taxes of the eleventh to the thirteenth centuries. The next section deals with the Crusader's taxes. He then treats of the fifteenths and the tenths and other taxes on movable property in the twelfth to fourteenth centuries. Next of the so-called Income Taxes of 1135 to 1450. Then of the subsidies from the fifteenth to the seventeenth centuries, and of poll-taxes and taxes on means or position. An appendix, consisting of an extract from a Parliamentary Roll of 1450 (Henry VI., 1422-1461), shows a specimen of the attempt to tax every form of property and income.

In the second portion a rapid but clear review is afforded of taxation, especially the property-tax in every form and stage, in the North American States to the middle of the nineteenth century. These sketches are somewhat slight, though it is apparent that Dr. Moll possesses information sufficient to treat the history fully. After a chapter on average capital and "phantasy" capital, by which Dr. Moll appears to mean capital which is estimated without reference to fixed property, we have a history of property-taxes in each of the States in turn. A very useful and interesting feature is the references, by way of foot-notes, to the authors and documents referred to, including the Parliamentary Rolls, the American State papers, and numerous writers on taxation, English and American, besides a number of German authors also.

Necessarily this work will appeal primarily to those foreign students who desire to gain an adequate knowledge of early English and American experience in taxation; for English-speaking students have a wide literature on the subject, which will be more accessible to them. I have not found reason at any point to doubt the correctness of his facts, which are brought forward with that laborious thoroughness which it is the despair of some of us to copy. Of the English history Dr. Moll has a firm grasp, though I am not sure that he has not been guilty of studying our taxation without a sufficient regard for our essentially "feudal landed system. There is a temptation to do that, for the

tracing of the fiscal history is itself laborious owing to its complexity and absence of principle.

However, it is only from a very critical standpoint that this can be said of Dr. Moll. He appreciates the fact that taxation in England was something solved *ambulando*—no far-seeing, far-reaching principle was adopted with deliberation. Our sixteenth and seventeenth century fiscal expedients were decided by two things chiefly, the necessity of getting the money, and the readiest means of doing so—nor are these obvious considerations abandoned yet. To the student, on the other hand, it appears more and more plainly how the fight between burdens on land and immovable property, as against all other forms of taxation, is age-long, waged in the sixteenth and seventeenth, and waged still in the twentieth century. It is plain, too, that in these early Plantagenet and Tudor times the main source of the public revenue was the land and immovables. The sumptuary taxes, and the various attempts to assess general possessions, salaries, and so forth, were always and ever second thoughts, which have, it may be added, never proved best. Gradually our forefathers worked out the idea of taxing an income, but found the means of doing so a difficult matter. In the course of long and continued experiments, which were not critically and scientifically conducted, but bore marks of the irruption of interested motives into the work, there were oscillations between capital and income as the basis of assessment. How significant it is that we have not settled this matter yet! We have still to struggle on, some of our imposts, even on property and income, being assessed on capital value, while others are levied on an assessment of annual products. In all our work the need of a valuation of land and immovables meets us at every turn, and Dr. Moll will aid the student to realise how this is so by his succinct account of our many experiments in this matter. (Throughout this work it is interesting to find that Dr. Moll has the Continental notion of the line between direct and indirect taxes.)

I cannot do more than to refer very slightly to the American section of the work, though it is longer than the English through the necessity of dealing, however briefly, with all fourteen eastern States. The author's *resumé* of the efforts at taxation is highly attractive. I have referred to the merely practical, almost arbitrary character of the English taxation: in the American States such matters were in a more naked and experimental stage still. The various American States are seen stumbling from pillar to post, the general but hazy notions entertained being that, while certain moneys were necessary, everybody should be reached

by taxation. Throughout, fairness and equity seem to have taken a back seat, and frequently were neglected quite firmly. Everybody must be taxed, all sorts of things, and the chief matter was how to overcome the difficulty of doing so. The problem, under aspects which are not much altered, is still in course of solution by the Americans who hold Conventions at Chicago and Baltimore. Who is to pay the piper, and at what rate, and by what measure, are still the questions at the back of nomination and its exciting scenes. Dr. Moll once more enables us to see the taxation workshop, and the smiths at work. I open the work at New Hampshire, and find in 1770 and 1772 changes made, which included: (1) poll taxes; (2) taxes on the capital value of land in use, and on cattle also; (3) taxes on houses, mills and other visible objects, by net yearly income; (4) taxes on loan and trade capital; and a "faculty tax," by which anything over £20 was made taxable. This reference, however trifling, is sufficient to make one wonder how any sound metal could issue from such a furnace. The American States were visibly, deeply influenced by the experience and practice of the British Kingdom, but yet were working out their own destiny, and trying, by faltering steps, and amid much individual rivalry, to find a path which would avoid the sloughs into which their kinsmen had stumbled throughout their history. But land was the source of all means at first; land remains as the first source and subject of taxation. This short history of fiscal experiments by people of British blood on both sides of the Atlantic will be useful; so useful as to suggest the desirability that it should appear in English, as we have no work of this compass which affords so much light on the experiments made in this realm. Such a handbook should be of special value now, when we appear about to take up the agrarian question seriously. That question cannot be raised thus without making it plain that the sources of contribution to revenue remain a question still unsolved, apart from the further question of the proportion which the various sources should contribute. The student meanwhile has a very useful aid in Dr. Moll's brief comprehensive history.

W. M. J. WILLIAMS

Entwicklungstendenzen der Weltwirtschaft. By DR. SIGMUND SCHILDER, Sekretär des K. K. österreichischen Handelsmuseums in Wien. Vol. I.: *Planmassige Einwirkungen auf die Weltwirtschaft.* (Berlin: Franz Siemenroth, 1912. Pp. viii + 393. 9 marks.)

DR. SCHILDER devotes the first volume of this work to a discussion of the "systematic influences" which affect the world's

trade, influences such as tariffs which directly and intentionally work upon commerce; in a second and future volume he proposes to discuss natural factors, such as raw materials, tropical agriculture, &c., and social conditions, such as the trade in luxury goods. His main theme in the work before us is to oppose the view of the high protectionist school that international commerce is declining, at least relatively if not absolutely, as compared with the national industry which works for home markets. As a corollary, he maintains that the best trade policy is one of moderate protection for defensive purposes, with duties ranging from 5 to 15 per cent., which will not burden the consumer but will be effective for retaliation. It is surely the oddest of all odd contentions to maintain that because the home trade is strong and growing larger, therefore it must be protected by a closing of the frontiers to all competition. But that view of the high protectionist policy does not occur to Dr. Schilder. He seems rather to argue that people will have tariffs, that some interests will insist on using their tariff in an excessive manner, and that consequently a wise statesman will provide himself with means of defence. Free Trade on the British model is to him always "wehrlos," defenceless, whereas he constantly describes his "moderate protection" as "wehrhafter Freihandel," a phrase which defies translation. He is, in fact, a "free trader with a but—."

The extreme protectionists declare that moderate protection of the stamp of the Caprivi treaties is a failure, that industrial countries are building their walls higher, that they are making their tariffs more specific, that they are trying to annul the "most favoured nation" principle. Dr. Schilder retorts that high protectionism taking the form of an alliance between agrarians and favoured industrial groups works is a "social disaster" by raising the cost of living and so reducing the consumption capacity of the inland market. The forced exports which follow,—as a result of the trusts and kartells devoting themselves to the exploitation of the home consumer,—only benefit the countries on which they are "dumped," while the dumping does no real injury to the general industry of those countries. Tariff walls do not exclude: "for every door that is shut to the export of British manufactured goods," he says, "two are opened." Industry possesses in too high a degree the Spencerian attribute of evolution, the power to differentiate itself in an ever higher degree, has too strong a capacity for invention,—to yield to the puny efforts of men to deflect the course of commerce. The meshes of the tariff net, to alter the metaphor, are never fine enough to stop the best pro-

ducts; while they do at times turn important new raw materials, like soya beans, to British shores, to the great profit of British manufacturers. So far from the "closed state" being the highest ideal of commerce, Dr. Schilder points out that the large protectionist countries owe their strength to the fact that they are in reality great free-trade areas, which have become wealthy by abolishing wasteful internal barriers, and that their wealth forces them into the international market as purchasers.

He shows by a historical survey that important concessions are extorted by negotiation, and by the threats more than by the practice of tariff wars, even from those nations that bear aloft the banner of the ideal of prohibitory duties. Nay, more, he shows that "defenceless" Britain was "in the best position" to obtain concessions from France because of her general policy towards that country, that Japan considered her alliance to be worth important remissions of duties, and that Portugal and other countries have thought that the protection of the British Fleet easily paid for favoured treatment. In fact, trade relations form a part of general international relations, and "trade policy" both affects and is affected by "foreign policy"; the two are not in watertight compartments. Why, then, is Dr. Schilder not a free trader? Apparently, to some degree, because he dislikes being doctrinaire, but still more because Britain objected to the annexation of Bosnia and has been engaged in a wicked plot to "hem in Germany," the ally of Austria. To his politically jaundiced eye England is a villain setting all the countries of the world by the ears so that she may profit by their disputes, forcing all nations to arm against her and to incur immense expenditure to keep the peace, maintaining her free-trade policy at the risk of Armageddon. Well, economists should, above all things, be "sachlich" and avoid the fantastic, and with that remark we may leave Dr. Schilder, the politician.

Apart from the political support to her free-trade policy which Britain derives from her position as a great world-Power, she can also rely on her extensive trade with her Crown Colonies, on her trade with the "countries of the open door," on her preferential position in the self-governing dominions, and on the recent policy of confining all public contracts to manufacturers within the British Empire. This last-mentioned factor is becoming one of some importance and would repay study. As a fresh contribution we may mention that the Victorian Government recently instructed its railway department, which had been giving orders to Krupps', though not the lowest tenderers, that "taking

into consideration the quality, time of delivery, and price of the goods, orders are to be given to British manufacturers as against foreign tenderers." Of even more importance, our author holds, are the immense investments of British capital both in the Colonies and in foreign countries. To this and to the lesser investments of German capital is due the fact that the United States fail in their efforts to extend their economic sovereignty over the South American Continent. Although we do not use the somewhat forceful methods of France to compel orders to be given to home firms in return for loans, Dr. Schilder maintains that there is the closest connection between the rate of British investment abroad and the growth of British exports, and devotes a lengthy historical summary to proving his case. The cry of "driving capital abroad" he roundly dismisses as "nonsense," and he boasts of the extent to which other countries are overtaking Britain in this fatal employment.

There is much more in this most interesting volume that calls for discussion—the author's demonstration that the fear of a growing divergence between agricultural and industrial development leading to a commercial catastrophe is groundless; his discussion of the development of tropical and sub-tropical colonies; his dissertation on the "countries of the open door"; his criticism of the policy of kartells—but where every chapter affords the subject for a long article we must content ourselves with the brief and imperfect summary which we have given of the main thesis so far as it affects British trade. The book is a monument of industry, and is invaluable to every student of international trade policies of the past twenty years. With the exception of the one divergence into "politics," the author is generally very fair, and if he appears to have unconsciously proved more than he intended when he set out to defend "moderate" protection, many will not take it amiss in him.

H. W. MACROSTY

Handel und Produktion in der Baumwollindustrie. By DR. EDGAR LANDAUER. (Tübingen: J. C. B. Mohr. 1912. Pp. xi+183. Price 5.60 marks.)

THIS supplement to the *Archiv für Sozialwissenschaft und Sozialpolitik* is of somewhat wider scope than its title, for it covers not only the cotton industry proper but also the bleaching, dyeing, printing, and finishing trades that are concerned with the "improving" or "veredelung" of cotton goods. About one-fourth of the book is devoted to a description of the British cotton industry

and nearly as much to that of Germany; the Austrian industry occupies twenty-eight pages, and a hurried glance at France and the United States takes eight pages. The principal theme is that the Lancashire industry has thriven on its specialisation, the division of the trade according to the stages of production being followed by a specialisation of factories which confine themselves to a few products. This development has brought into existence a strong merchant class which integrates the whole industry, brings its various parts into harmonious relations with one another, and equates production to the shifting demands of the market. The combination movement has spread only in the bleaching, dyeing, and printing trades, where "horizontal" combination has made possible a more thorough specialisation of works. This complicated system of sharing the industrial and commercial risks of production has enabled manufacturers to devote themselves to the complete mastery of their technical and labour difficulties. This part of the book is practically a summary of the recognised authorities, but it is a very good summary. It might have been worth the author's while to point out that specialisation is also fostered by the existence of a strong trade in yarn, both for export and for the home hosiery and woollen industries, and by the ease with which new men can enter the industry as commission spinners and weavers. 'The Fine Cotton Spinners' and Doublers' Association, Messrs J. and P. Coats, Ltd., and the English Sewing Cotton Co., Ltd., bulk largely in the spinning and doubling sections of the trade and are combinations.

The sections dealing with the German and Austrian cotton industries will be of great interest to the British student, as they deal with facts much less well-known. It is very clearly shown how the Continental trade suffers from the lack of specialisation and from the weakness of the merchant class. Incidentally, it is plain how difficult it is for an industry to escape from its historical development; the absence of one district specially favoured by climate has prevented the local concentration of the German industry and has brought all the other weaknesses in its train.

H. W. MACROSTY

Elements of Economics, with special reference to American Conditions. By H. R. BURCH, Ph.D. and SCOTT NEARING, Ph.D. (New York: The Macmillan Company. 1912. Pp. xvii + 363.)

THIS book, intended for those beginning the study of economics, claims attention for its method of treatment rather

than for originality of thought. In arrangement the traditional plan has been followed of dealing first with the nature and consumption of wealth, and then with production, exchange and value, and distribution. Within these limits, however, the order of treatment is not always beyond criticism. Thus, to treat unemployment in connection with the factors of production before the theory of value has been studied, makes it unlikely that its nature and causes will be appreciated; and to consider taxation under the head of exchange of wealth, obscures many of its most important aspects.

The book has many good features. The exposition is clear and vivid. Examples, mainly drawn from American conditions, are freely and aptly introduced, and serve to emphasise throughout that economics deals with man as he is, and in the ordinary business of life. Precision of expression, at times approaching dogmatism, is another praiseworthy characteristic, for with beginners qualifications and exceptions lead, as a rule, only to confusion. But in one requisite of a good text-book the book is lacking. It is important with beginners to emphasise the relative importance of different parts of the subject, and this can generally be done only by judicious omission. By attempting to include too much the authors have made the book scrappy. The chapter on foreign trade is quite inadequate, the doctrine of comparative cost not even being mentioned, and the incidence of taxation is dismissed in eight lines. On the other hand, whole chapters are devoted to a superficial discussion of the technical aspects of soil fertility and the production of new species.

These defects might perhaps be remedied under the direction of a good teacher. More serious, however, is the fact that the student is unlikely to realise the fundamental importance of the theory of value. To start from the proposition that immaterial wealth differs from material wealth, in that it cannot be exchanged, and that economics is primarily concerned with material wealth, paves the way to difficulties. Nothing is more important than for the beginner to realise that services of all kinds can be exchanged, and until this is grasped the theory of distribution will be found hard to understand.

As it is, the present book neglects the application of the theory of value to distribution, and an essential key to the economic mechanism is therefore never placed in the student's hands. Moreover, no attention is paid to the influence of different periods of time on the extent to which the various forces determining value operate; nor is the fundamental similarity of rent,

interest, and wages emphasised, or their differences ascribed to differences in the nature of the supply of land, capital, and labour.

One or two other features of the book deserve mention. There is a useful analysis of the subject-matter prefixed to each chapter, and topics for class discussion are given which may stimulate the imagination of the teacher. The references to books would have been more valuable if chapters or sections in a few standard books only had been indicated. To send the student to Karl Marx, or the *Origin of Species*, without further explanation is to court disaster.

W. G. CONSTABLE

Elements of Socialism: a Text-book. By JOHN SPARGO and GEORGE LOUIS ARNER, Ph.D. (New York: The Macmillan Company. 1912. Pp. iv + 392.)

A GOOD text-book on Socialism has long been wanted, but it is doubtful whether this book fills the gap.

In some ways it is an improvement on many existing books of a similar kind, for it aims at a vigorous presentation of all the most important aspects of Socialism—as a criticism of existing society, as a philosophy of social evolution, as a political and social ideal, and as a movement in the world to-day. The most useful parts of the book will probably be found to be those dealing with the ideals of Socialism, and the history and present position of the Socialist movement. It is perhaps unfair to expect too much in a text-book, but the authors do not explain satisfactorily the Socialist attitude on two important problems likely to arise in a Socialist society: how to secure incentives to labour and to the accumulation of capital. The latter question is not touched upon at all, but it is clear that if the State is to control the principal agencies of production and exchange it will have to settle where its capital is coming from, whether it is going to pay interest thereon, and, if so, how much. Also, no indication is given as to whether Socialists hold as a principle of distribution “to each according to his works” or “to each according to his needs.”

The section dealing with the Socialist movement omits one or two important matters. The Revisionist movement in Germany is touched upon, but not explained; and in the case of France, the General Confederation of Labour, and the doctrines for which it stands, are not mentioned.

In those parts of the book which deal with Socialism as a

criticism of existing^{*} society, and the economic and historical theory of Socialism, the authors have unfortunately not been content to confine themselves to exposition, but have wandered into the field of propaganda. Thus, a useful analysis of the Socialist indictment of modern society, and a careful exposition of the theories of Karl Marx, are marred by attempts to justify them, based in some cases on one-sided presentation of facts, and in others upon a misreading of economic theory. Thus, to imply that periodic fluctuations in business conditions are specially characteristic of the period of capitalist industry, and to say that "marginal utility does not confer value upon the masses of commodities, the exchange of which constitutes the trade of capitalist society," is to subordinate accuracy to the needs of advocacy. This lack of impartial statement is a serious defect in a book intended for a text-book.

Considered as an attempt to rehabilitate the theories of Marx, the book does not meet two important objections: first, that in the proof that the value of a commodity is determined by the amount of human labour embodied therein, the definition of value taken as a premiss assumes the conclusion; second, that while the amount of Marxian "surplus value" differs in different industries, this is inconsistent with the tendency of profits (the return on capital together with earnings of management) to equality over the whole industrial field.

Though the book will not replace the text-books of Kirkup or Sombart, it will probably be found a useful complement to them, mainly owing to its wide range.

W. G. CONSTABLE

Social Conditions in Oxford. By C. VIOLET BUTLER. (London: Sidgwick and Jackson. 1912. 4s. 6d. net.)

MISS BUTLER'S study of Oxford, in common with other analyses which have given us of late an insight into the social conditions of our older University towns, raises an interesting question. For centuries past these towns have poured out their treasures at the feet of their sons by adoption. How far has it proved of advantage to their children by birth to be cradled in a centre of learning? It is true that there were in the past unusually good opportunities for Oxford children to get education, either by apprenticeship or by schooling: while the "singular help, treasure, and commodity" which the presence of the University offered in the pursuit of learning was within reach of the poorest,

and Oxford schools of to-day keep up a high standard of efficiency.

But education apart, the answer to our question is problematical. Our newer Universities, established often in great industrial centres, at a comparatively late stage of their social development, afford here no parallel but an interesting contrast. There the pulses of industry supply a powerful stimulus to civic life; and there can be little fear of its becoming weakened by the intrusion of an element of population whose first responsibilities are not civic but academic. Oxford, as Miss Butler clearly shows, has been now for some eight centuries a place which has attracted streams of outsiders, drawing constantly to itself a fluctuating and non-productive population. At no time in her history have industrial forces been very powerful; in 1380, indeed, no less than eighty occupations were represented amongst her citizens, but the city has long ceased to be self-supporting in industry. With increased facilities for travel she tends to become more and more "a centre for the distribution of goods and the rendering of service."

The effect of this upon the permanent working-class citizens is in many ways detrimental. For one thing, the alternation of term and vacation has been, and still is, responsible for making certain trades, *e.g.*, the food trades, abnormally seasonal. Domestic work about the colleges has always been much sought after, for the "social advantages" it offers are considered to place it on a footing with employment in the superior shops. Many colleges now make an effort to continue some sort of work for their servants, even at lower wages, during the vacation. This, with the large permanent residential element which has come of late years to inhabit North Oxford, is a factor in lessening the evil of long recurrent periods of unemployment. In another direction it is probable that the vague possibility of work about the colleges accounts in some measure for the large amount of supplementary wage-earning with which women in Oxford content themselves, and it undoubtedly combines with the lack of any industrial alternative to keep the standard of women's wages unduly low.

Not the least interesting feature of Miss Butler's book is the material which it affords, especially in the introductory chapter, for following out this double strand of life, the civic and the academic, interwoven throughout the long centuries of Oxford's history. To this day a formal inspection of the butter sold in the market survives as a relic of the separate jurisdiction of the

University in the regulation of goods exposed for sale and the control of trade and prices. The quarrels between the city and the "cuckoo in its nest" were perennial. In 1789 the Oxford merchants, always jealous at any intrusion of foreign traders into the preserves of their free men, prosecuted a Mr. Parsons "for following a trade *not having been matriculated* or not being free of this city." But such a recognition of the status of traders licensed by the University was the outcome of long years of pressure and of constant friction.

Occasional signs of friendly interaction are, however, not wanting. In December, 1635, the University offered to the city its co-operation in relieving distress, raising £500 out of the colleges and halls towards providing for the impotent poor and setting able-bodied beggars to earn their bread.

The old squabbles are long since ended. It is perhaps typical that the University Press has of late developed into one of the most important industries of the place.

Miss Butler's chapters, which deal in turn with every aspect of citizen life, vary somewhat in interest, and the arrangement of her book entails a certain amount of repetition. Her chapter on Housing is of much value, containing as it does a detailed account of the special housing problems in a city of great antiquity, with a multiplicity of small owners, and of the measures which are by degrees being taken for their solution.

DOROTHY KEMPE

A Calendar of the Court Minutes, &c., of the East India Company, 1644-49. By ETHEL BRUCE SAINSBURY, with an Introduction and Notes by William Foster. (Oxford: Clarendon Press. 1912. Pp. xxviii + 424.)

It is satisfactory that the *Calendars of the Court Minutes of the East India Company* not only continue to make good progress but to maintain the high standard which has characterised the present series. Both the abstracts of the documents and the introduction are excellent—the former retaining much of the diction and "atmosphere" of the originals, while the latter is clear and connected.

Since this volume relates to the events of only five years, it is difficult to indicate the topics with which it deals. Some are the continuation of events the origin of which has been described already, others are merely the preface to later happenings. Perhaps the most outstanding feature of this instalment is the

vivid picture it presents of the depression after the Civil War. There are many incidents which show the extent to which the resources and the credit of the East India Company were curtailed through this cause. Again, as a further result, the position of the Company will be of very great interest to the student of monopolies for foreign trade during the seventeenth century. Hostility towards a royal charter and the general relaxation of civil government during a time of stress account in part for the ultimate rejection of the ordinance confirming the Company's privileges, though in the end (in 1659) an Act was obtained which confirmed the monopoly. For reasons which may be gathered from sources other than those calendered in this volume, and some of a later period, it may be conjectured that this decision was not altogether due to the strength of the arguments of the Company (*Constitution and Finance of Joint-Stock Companies*, I., p. 236). It is worth noticing that in this period a tendency showed itself for those who had been interlopers to join the Company—of course, on terms—and that the Act for establishing a Board of Trade arose out of this controversy.

One point in connection with the Introduction may be mentioned. Mr. Foster describes the distinction between a "Joint-Stock" and a "Voyage" in the following terms? "The operations of a Joint-Stock were usually spread over several years; fresh capital might be raised at the option of a majority of the adventurers; and there was no limit to the time the Stock might run. A 'Voyage,' on the other hand, was a subscription for the investment of a definite sum, the proceeds of which were to be realised and distributed as quickly as possible" (p. iv.) At the inception of most of the Joint-Stocks a term of years was fixed, as, for instance, eight years for the second stock and five years for the proposed stock of 1619 (p. 342). That the stocks lasted longer than the time specified was due to circumstances; but, up to 1664-5, there was always an intention that they should be wound up within a comparatively short time. The Voyage may be distinguished as an enterprise of even shorter duration, as, Mr. Foster writes, "its proceeds were to be distributed as quickly as possible." On the other hand, a later document is calendered than that on which I based my estimate of the capital of the First General Voyage (*Constitution and Finance of Joint-Stock Companies*, ii., p. 127). This document gives the figure as £104,537 10s. for the "capital stock," which is the final figure after all adjustments had been made.

W. R. SCOTT

La Passivité Économique. By MANLIO ANDREA D'AMBROSIO.
(Paris: Giard & Brière. 1912.)

WE feel some reserve in writing about this book. We have had before us only a French translation from the original Italian. This translation contains numerous misprints; certain passages have been omitted, and in other places the argument has been compressed (by the author). It is possible, therefore, that we should have taken a more favourable view of the work had we seen it as the author originally wrote it. It is probable that the work has value, for it has been highly commended (so the author tells us) by a number of eminent Italian scholars, and it has been or is being translated into four modern languages. It purports to introduce to the world an original theory of wealth and want. Previous inquirers, it is alleged, have never paid enough thought to the *proportion* of workers to non-workers in any population; yet it is upon this proportion in the main that the wealth or poverty of any population depends. This thesis is elaborated and defended in 380 pages, which show evidence of wide reading and a quick if rather superficial intelligence. Every now and then there is a remark that has some pungency, and at the end there is a purple patch—a kind of hymn to industry—about which we will say no more, since it is difficult to judge from a translation the value of poetry, whether in prose or in verse. Most of what is true or important in the book is known, we should have supposed, to all intelligent persons. That, by itself, is no proof of futility, since often the greatest service is done precisely by those writers who can show, to some practical use, the unsuspected bearing of platitudes. But the practical conclusion to which our author comes seems to be merely that we should do all that can be done to diminish the proportion of the unoccupied; and if the world took this book by the letter its last state might well be worse: for more than one passage might be interpreted as advocating the employment of children (though it is, we think, clear that the author does not really desire this), and the work which married women do in their homes is treated with sovereign contempt—hardly admitted to be “economic activity” at all. The treatment of evidence, statistical and other, is less thorough than could be wished. There is, indeed, nothing in this direction that might not be paralleled from the average newspaper; but the author begins his book with a tiresome assertion of the excellence of his scientific method.

“J’ai cru utile que ma modeste pensée fût le résultat naturel d’une preuve quadruple :

1° La preuve extérieure, c'est-à-dire : l'avis d'éminents autorités de la science ;

2° La preuve intérieure, c'est-à-dire : les raisons qui démontrent l'exactitude de mon opinion ;

3° La preuve historique, c'est-à-dire : la sanction de l'histoire à ma thèse ;

4° La preuve statistique, c'est-à-dire : la confirmation de la vérité de mon assertion par des chiffres statistiques."

Most readers will know what to expect from such an exordium. And we get it. Consider the following passage (p. 179) :—

"Quant à la fréquence du crimé d'infanticide, l'Angleterre ne le cède pas à l'Allemagne ni à la France. . . . A ce propos, il est bon de rappeler que le maire de Hendersfield (*sic*), en 1905, promet une livre sterling à toutes les mères qui, ayant un fils pendant l'année de son office, le lui présenteraient vivant et sain le jour où il devrait céder sa charge. Eh bien, cette année-là, la mortalité infantile de Hendersfield, qui était de 134 o/oo descendit à 54 o/oo."

It remains to add that hardly one reference is given throughout a book which purports constantly to challenge or summarise the opinions of other writers, and which contains numerous statistical tables. Perhaps this is a defect of the translation.

H. O. MEREDITH

Untersuchungen über das Volkssparwesen. Herausgegeben vom Verein für Sozialpolitik. (Munich and Leipzig : Duncker & Humblot. 1912. Pp. viii + 602.)

It has been asserted that the extension of the habit of saving is among the most potent factors in the solution of the social questions of our time. If this be so, then any consideration of thrift should be doubly welcome. The experiences of one district may be of use to another, and those of one country to its neighbour. It was, therefore, a wise suggestion which the Verein für Sozialpolitik, with its well-known interest in all practical problems, adopted when it decided in 1907 to institute an inquiry into popular saving. The book before us (which is described as Volume I) contains the first-fruits of the investigations.

From another point of view also, saving and the accumulation of wealth are obtaining an importance of their own. In the present state of the money market it is as well to be acquainted with all possible channels in which the flow of capital takes place. Hence questions such as these at once present themselves : Who

is it that saves? What classes of the population? Who organises institutions for saving—local authorities or private bodies? What particular kind of institution is most popular? What is the aim and object of the depositors? How are the accumulated moneys invested? What influence on saving is exerted by the prevailing rate of interest?

An answer to each of these questions is attempted in the six papers of which the book is composed, and when it is added that Prof. Schumacher, of Bonn, has directed the enquiries, it may be taken for granted that the results are valuable. Perhaps the best, certainly the fullest, of the half-dozen contributions is the first (by Dr. Richard Poppelreuter) on saving in the country district round Bonn. By way of contrast there is another paper (by Dr. Jacob Reichert) on saving in a fairly large city (Mannheim). Dealing with a still greater area, we have a third contribution (by Dr. Victor Honnburger) on Baden as a whole. The three remaining papers deal with thrift in some typical small towns (by Dr. Fritz Hauck), in Offenbach (by Dr. Carl Leonhardt), and in Aachen (by Dr. W. Kähler).

A mass of information has been collected by the six writers in regard to the different kinds of depositors, touching sex, calling, and age. It has not always been easy to obtain the fullest information, by reason of the secrecy with which depositors love to cloak their saving activities. In this respect conditions are no different from what they were when Cliffe Leslie wrote his essay on "The Known and the Unknown in the Economic World" (1879). It is curious to learn that at one savings bank in Offenbach that portion of the room where deposits are actually handed in is divided off from the general waiting-room by a large screen, and only one depositor at a time is allowed to enter this sanctum after being called not by his name, but by a number. And in order that a depositor may have no knowledge of how much the last man paid in, a sheet of blotting paper covers the open pages of the entry-ledger! Despite these difficulties, however, one or two facts stand out clearly enough. To take one instance. It would appear that by far the largest percentage of depositors are fathers of families and heads of households. In Mannheim, for example, this class forms 26 per cent. of the Municipal Savings Bank depositors, and 53 per cent. of those at the various banks. Next in order are children, chiefly because it is considered the proper thing for youngsters to have savings bank books, and the standard of living demands it. Married women are low down in the list, and most of them save behind their husband's backs. On the

whole, all the investigators are agreed that women are more inclined to save than men, and this even applies to school children.

As for the most-favoured savings banks, the peasantry certainly attach more importance to the individuals with whom they come into contact at the institutions than to the institutions themselves. A striking illustration is furnished by Dr. Poppelreuter. At a small centre in the vicinity of Bonn the savings bank appointed a new manager and cashier, who was trusted by the inhabitants to a greater degree than his predecessor. He entered on his duties in June, 1906. The result was that whereas from January to June 15,000 marks were deposited and over 72,000 withdrawn, from June to December over 64,000 were deposited and only 19,000 withdrawn. Of course, the psychological motive in the choice of a savings bank is not the only one that weighs with depositors. Economic considerations also count, and even the country bumpkin is beginning to be attracted by a high rate of interest.

The purpose for which savings are accumulated vary in different social classes. The well-to-do farmer extends his holdings by their aid; the official or tradesman buys securities; the shopman and the clerk lay by for "a rainy day." Whether the schemes for national insurance have a prejudicial effect on the voluntary thrift of the working classes none of the writers seemed able to discover. It is a point of some interest, and deserves close scrutiny. A curious fact about withdrawals is that they are generally noticeable in April and October, say in spring and autumn. One reason given is that people move in these months. Another generalisation, though very great care is needed in its application, is that, when marriages are few, deposits rise (January, February, and July), when they are frequent, withdrawals increase (April, May, and October).

How the savings banks utilise their capital is a question of no small moment. On the one hand their aim must be to retain the money of a locality in the locality itself; on the other hand, it must be their policy so to invest the sums at their disposal as to obtain the best possible rate of interest. And what of their profits? Should any part be applied to social purposes? These questions are considered both generally and in relation to local requirements.

We have said sufficient to indicate that the book is packed with special material, throwing light on one of the more hopeful phenomena of social life. The interest of most people nowadays centres, no doubt quite rightly, round poor relief, the care of

the feeble-minded, distress caused by unemployment, and so forth. There is a danger in this—that the dark side of the shield may blot out all remembrance of the more promising one. A book like the one before us is useful, quite apart from its inherent worth, by its insistence that the social horizon is not all dark. For this, as for an excellent piece of research work, a debt of gratitude is due to the Verein für Sozialpolitik.

M. EPSTEIN

NOTES AND MEMORANDA

THE FOREIGN BRANCH BANKS IN ENGLAND, AND THEIR INFLUENCE ON THE LONDON MONEY MARKET.

THE rapid growth of foreign branch banks in London has caused a good deal of uneasiness among English bankers, who sometimes consider that the presence of such institutions means competition and ultimate loss of business to London banks. We hear rumours of inroads into operations which have hitherto been directed by British financiers, and warnings of the hold the foreigner will obtain over our Gold Reserves. Yet the opening of foreign banks in London means the influx of considerable additional capital into our commercial and financial markets, and must have the effect of stimulating our foreign trade.

It is not, however, the purpose of this article to discuss competition in banking, but to show the manner in which the foreign bankers carry through commercial and financial transactions, and at the same time to give some idea of the part they play in the adjustment of the money market.

Foreign financiers are guided by similar considerations to those which lead manufacturers to cater for markets that show the most profitable return: they are drawn to the London money market by the facilities offered for exchange operations, in which bills are an important factor. Continental capitalists are keenly alive to the fact that London is the centre for the settlement of international indebtedness. A bill of exchange is everywhere the medium for settling international transactions; bills form an important part of the financial operations in connexion with foreign and colonial trade; and consequently these bankers realise that their sphere of influence can only be extended by their power to direct operations from this, the principal money market of the world.

The foreigner does not confine his operations to bills with a British domicile, but is chiefly concerned with foreign bills; while English bankers are, as a rule, restricted to the internal trade

instruments, and although foreign bills return an attractive profit, very few London bankers carry such paper. No satisfactory reason can be assigned for this strange neglect of a sound investment by British financiers; many of them carry foreign stocks; but few foreign bills are to be found in their bill-cases, and almost the entire stock of such acceptances finds its way into the portfolios of the foreign banks and discount houses.

• Let us take the case of the English exporter who wishes to send goods to Siam. Some considerable time must necessarily elapse before his shipment could reach, say Bangkok, and in the meantime he is in need of further capital to enable him to continue the manufacture of goods. He therefore sends his bill, accompanied by a set of shipping documents, to the London office of a foreign bank having a branch or an agency in Siam, which, if the exporter's standing warrants it, will purchase his bill on the Bangkok importer, sending it to the bank agency there for presentation for acceptance and eventual payment. When the bill is drawn in Siamese currency it will be negotiated at the rate of exchange for the day on the place concerned, interest on the amount the banker pays for the bill being included in that rate. But when the bill is in sterling, it is customary to require it to contain a clause providing for interest on the amount from the date of the bill to the approximate due date of the arrival of the counter-remittance in London. There is, however, an element of speculation in the purchase of currency bills because, although the banker hopes to make a profit on the foreign exchange, over and above the interest, it is not unlikely that the exchange may be against him before the maturity of the bill.

It is apparent that this bill finance is a business which requires expert and extensive knowledge. The foreign banker is bound to keep at his finger-ends the standing and *morale* of every firm from whom he purchases bills, and this necessitates the keeping of special books termed "Opinion Lists," which form, so to speak, the financial history of his clients. In the lists each customer is accorded a certain classification, or credit worth, and the banker is guided by these details when dealing with the sellers of foreign bills. Where the drawers are financially strong, and the drawees prompt in settling their engagements, the banker will pay more for the bills than he would where the parties are comparatively weak.

The exigencies of modern commerce have called into being a variation in this method of finance, which, although not encouraged in some quarters, tends to become more common every

day,—the practice by which foreign branch banks in London accept bills on behalf of their clients. Where a merchant is held in high esteem, the bank opens what is called an “acceptance credit,” which entitles him to draw bills on the London branch of the bank up to a certain limit. When such a credit is opened, the shipper prepares his bill of exchange, attaches the necessary shipping documents, and presents the complete set to the banker, who accepts the bill, returns it to the drawer, and forwards the documents relating to it to the foreign city. A small commission is charged for this accommodation, and in reality the trader pledges his goods with the banker, for he signs a Letter of Hypothecation giving the banker a lien over the shipment, and also undertakes that the proceeds of the consignment shall be remitted to London through the foreign branch of the bank, at or before maturity of the bill, upon which the banker has now become liable.

The banker's commission on the transaction is trifling. Why, then, is a banker prepared to make himself liable on these acceptances? As he and his foreign agents are fully empowered to exercise control over the collateral security, and in practice keep a sharp eye on the disposal of the merchandise, the risk is reduced to a minimum. But there is a further point to be considered which is not present in the ordinary inland bills—the question of exchange. The foreign banker expects to make a profit on the exchange in the currency of the two countries when remittances are sent here to meet bills maturing.

In the case where a merchant in Bangkok has shipped goods to England, a bill comes into London from Siam; we may presume it is at three months' date or sight, and that it is accompanied by shipping documents to be delivered up on acceptance of the bill. Immediately on arrival, the London office of the foreign bank presents the bill to the importer, who accepts it and receives in exchange the documents of title to the goods.

In the hands of the banker this bill, or acceptance, as it is now termed, represents a security much in demand by London financiers, therefore the foreign banker's next step is to get into touch with these investors. This is done through the intermediary of a bill-broker, whose practice it is to visit the London offices of foreign branch banks daily to obtain particulars of the acceptances on offer. There he is furnished with complete lists on which the bills are classified according to usance and domicile, and with these in his possession the broker is able to invite offers from the English bankers or discount houses, who are guided by certain principles in purchasing the acceptances. The standing of the

parties to a bill, the future of the discount market, and the cash demands likely to be made upon bankers are all important factors to be considered by discounters; therefore, the rates ruling on the open market are not always obtainable, and the bill-broker submits counter offers for parcels of bills suitable to the prospective purchasers. If the rates offered are accepted by the foreign banker, he transfers his property in the bills by endorsement and hands them to the broker in exchange for the latter's cheque: the bill-broker in turn passes them on to his clients, the London bankers or discount houses.

These acceptances, bearing the banker's endorsement, are usually discounted at lower rates than the ordinary commercial bills, as the buyer has recourse to the banker in the event of non-payment at maturity.

It must not be supposed, however, that each batch of discountable bills represents the acceptances of London firms; there is often a percentage of paper bearing the acceptance of Continental traders or finance houses. These are termed "Foreign Domiciles," that is, bills accepted, say in Paris, and payable in London, and, as we pointed out in a previous paragraph, English bankers are averse from carrying such bills in their portfolios. In fact, the Bank of England will not discount these acceptances, even where they bear the endorsement of Continental banks and finance houses of the highest standing, and as a result of this discrimination against "Foreign Domiciles," a higher rate is charged by the brokers or discount houses, who finally take a proportion of such bills from the foreign branch banks.

In their anxiety to discourage the circulation of "Foreign Domiciles" on the London market, English bankers have recently decided to extend the ban to bills known as "Foreign Agencies." Under this heading are included bills accepted by the London agencies of Continental or foreign firms, whose principal assets are not available in this country, and for these acceptances discounters exact a rate from 1/16 to 1/8 per cent. higher than that charged for discounting first-class English domicile bills.

We now come to a consideration of our second example, the bill bearing the name of the foreign branch bank as acceptor. In its present form the bill is of little use to the merchant or manufacturer who has received it. He requires liquid capital in his business, and cannot afford to wait until the bill matures for the use of his money; therefore, as soon as the bill is accepted he gets his own banker or one of the finance houses to discount it at the rate of the day. Such bills are called "bank paper," and as

they are the London acceptances of foreign banks of first-class reputation, there is no difficulty in obtaining buyers at rates considerably lower than those charged for discounting ordinary trade paper. These acceptances, however, must not be confused with "Foreign Agencies"—the latter are bills emanating abroad and accepted on arrival in London, but the bills under the acceptance credit originate in London, where they are drawn, accepted, and paid.

In each case, that of the foreign bill coming into London, and the bill accepted here by the foreign banker, the instruments change hands a number of times before payment at maturity. The services of the bill-broker are therefore in constant request. In practice he is expected to buy at current rates all good bills offered to him; it is obvious, then, that the profession of bill-broking calls for large funds, and as the broker is obliged to keep his capital liquid, he is really precluded from holding many bills himself until maturity. All paper purchased is promptly re-discounted, that is, sold to any London, country, or Continental bank in need of bills of exchange as an investment, and in this case bankers will usually buy the bills at rates slightly below the market quotations.

If, for instance, the broker buys three months bills at 3 per cent. and re-discounts them with a finance house at 2-15/16 per cent., he secures a small profit on the sale. Bankers are content to allow the bill-broker to make this profit for two reasons: first, because owing to his expert knowledge of the standing of the parties to the bills, he guarantees that the bills are what they purport to be; and, secondly, every purchaser of paper stipulates for an assortment of usances, *i.e.*, a proportion of bills at three months' sight, four months' sight, and six months' sight, the intention being to provide for payments to fall due at a time when it is necessary for the banker to replenish his cash holdings.

It is common knowledge that the bill-brokers employ, in addition to their own capital, a very large amount of money borrowed from the English banks at "call" or "short notice," but the part the foreign branch banks take in the provision of the additional funds is not equally well-known to economists.

As we have shown, the foreign banks in London render efficient aid not only to their own countrymen, but also to British firms; they have brought, and continue to bring, large sums of money into this country, and the skill with which they deal with the bill of exchange business certainly sets free a large amount of capital for productive purposes. The London bill-brokers are

indebted to them for many profitable discount transactions, and all financiers dealing with the London money market are, in a measure, benefited by the assistance of the foreign branch banks. But the point to which we particularly wish to refer is their connexion with what is termed the "Short Loan Fund" of the money market, which includes all sources from which the bill-brokers obtain their borrowed capital,—although, of course, the funds in the short loan market are not entirely made up of money lent in the discount market, a considerable amount representing short-date loans to stockbrokers.

A large proportion of the Short Loan Fund is, it is true, obtainable from the London Joint Stock Banks, but the foreign branch banks bring their quota into the market, and it is clear from whence they derive the money. As we have seen, they sell the bills received from abroad, and this brings a fair amount of cash into their treasury. But to meet the bills which have been drawn on the foreign bankers under London acceptance credits, large remittances are received from abroad in the shape of Telegraphic Transfers and Demand Drafts, and these, of course, give the foreign branch banks the right to withdraw from the London Joint Stock banks the amounts they represent. If, therefore, as not infrequently happens, there is no immediate profitable outlet for the money, the funds are immediately lent out, either at "call" or at "short notice," to bill-brokers and stockbrokers until wanted. As cover for the loans, bill-brokers usually deposit first-class bills of exchange, but "terminals" and "floaters," i.e., high-class securities "to bearer," such as Consols, Exchequer Bonds, Treasury Bills, &c., are accepted from each class of borrower.

The rate of interest charged on these loans is governed by the ordinary rules of supply and demand, in this case the intensity of the demand for and the supply of "call" money. Whenever the London Joint Stock Banks have an accumulation of funds, there is competition to lend to brokers, and rates are forced down. If, however, the bankers determine to replenish their reserves, loans are called in and rates rise. In this connexion the foreign branch banks perform a useful function, and the position they take in the adjustment of the money market is an important one. Owing to the special class of business in which they engage, and to the fact that they are not wholly dependent upon London financial markets, they sometimes have a plethora of funds in hand when the other sources of supply are obliged to restrict credit facilities: in such circumstances, when the foreign banks make money available to the short loan market, not only the

brokers benefit, but also the whole of the London banking and commercial community, for the funds which they bring into the market serve to relieve the pressure on English bankers and at the same time to keep rates steady.

Everyone recognises the importance of our money market's remaining a cheap one—that is an essential element in the preservation and extension of our foreign trade, and if it is realised that the resources of the foreign branch banks help to lower the value of money in London, it must be at once apparent that their presence in our midst also gives undoubted aid in the expansion of our home and colonial industries.

One of the most noticeable features in the Short Loan Fund is its inelasticity; the supply of floating capital does not greatly vary from day to day, the money supply simply changes hands. As is well-known, the major portion of the Loan Fund of the country is held by the banks, and when in consequence of demands upon him one banker is obliged to withdraw funds from the market, the amount automatically finds its way to the till of another banker, who is then in a position to lend precisely the amount the first banker has "called." Therefore, where English bankers are concerned, the operation is simply an exchange, no new creation of credit takes place; but the case may be rather different where a foreign branch bank is concerned.

As a considerable portion of the money held by the London banks represents customers' deposits, current account balances, &c., it not infrequently happens that a common demand will be made for funds—the Revenue collection of taxes from January to March is a case in point—and the banks will then call collectively from the market. The sum total thus withdrawn from the Short Loan Fund in due course finds its way to the coffers of the Bank of England, which promptly lends the money out again to the market; but it is clear that the amount is really a replacement of the sum previously withdrawn, and it cannot be regarded as a creation of new credit.

Does the foreign branch banker in similar circumstances create credit? Only in so far as he brings absolutely "new money" to the market. Where he draws on a balance at his own London bank, or cashes demand remittances on London from abroad, the operation is merely an exchange, but where he actually adds capital to the fund, he does swell the balance at the disposal of the London market. This is seen in cases where the foreign banker is an importer of gold bullion or specie. Immediately on arrival of the gold the equivalent is placed to the credit of the

banker at the Bank of England, and he forthwith proceeds to employ it in the short loan market. Such an addition to the fund is obviously a further creation of credit.

WILLIAM F. SPALDING

OFFICIAL PAPERS.

Report on Condition of Women and Child Wage-earners in the United States (in 19 volumes). Vols. IX., X., XV., and XVII¹ (Washington: Government Printing Office. 1911.)

THE Report on Women and Child Wage-earners in the United States comprises, in addition to a minute inquiry into the various trades in which women are engaged, volumes on the "History of Women in Industry," "History of Women in Trade Unions," "Relation between Occupation and Criminality," and "Family Budgets of typical Cotton-mill Workers." Those concerned primarily with the trades, viz., the cotton textile, men's ready-made clothing, laundries, &c., go with great detail into such questions as the numbers employed from 1880-1905, employment of children, hours of labour, earnings of operatives, working and family conditions, and furnish a large amount of statistical evidence, which cannot fail to make them invaluable as books of reference. As the other volumes, however, raise problems of a more general character, and are likely to appeal to a wider circle of readers, it is these which we will deal with here.

The "History of Women in Industry" begins by asserting that "women have always worked," and that "their work has probably always been quite as important a factor in the total economy of society as it is to-day." Though this seems an obvious statement, yet it is not generally admitted, because of the failure to realise that the "revolution," which has undoubtedly taken place with regard to woman's work, has to a large extent been rather a transformation of unpaid into paid services than an entirely new creation of fresh avenues of employment. The Report then proceeds to give an account of the industries concerned with textile manufacture, clothing, sewing, domestic and personal service, tobacco manufacture, paper and printing, trade and transportation, and shows that they have in nearly all cases passed more or less through the three stages of home, small shop, and factory. On the whole, it is a gloomy story of "constant changes or shiftings of work and workshop, accompanied by long hours, low wages, in-

¹ For a review of Vols. vi, vii, and viii, see *ECONOMIC JOURNAL*, March, 1912.

sanitary conditions, overwork, and the want on the part of the woman of training, skill, and vital interest in her work."

In the course of the inquiry the displacement of men by women and the causes of the low wages of women are discussed. It is shown that the former has not taken place to any appreciable extent, and with regard to the latter it is contended that low wages are due to lack of proficiency owing to insufficient training, which, in its turn, is ascribed to the fact that a great majority of women still look forward to marriage as a "relief from intolerable drudgery." The solution offered does not appear adequate, and a fuller investigation into the problem would be advantageous.

The question of home *versus* factory work is dismissed in a short paragraph, and the assertion is made that "the movement away from home-work can hardly be regretted." Scarcely sufficient evidence is given in proof of this statement. The advantage of shorter hours in the factory is at least a doubtful one, for although the hours have generally been reduced to ten a day, yet "the intensity of the work has been very greatly increased." Further, low wages and insanitary conditions are by no means a *sine qua non* of home-work, as Trade Boards and sanitary laws have shown.

Vol. XV. on the "relation between Occupation and Criminality" reaches the result that no direct causal relation is discoverable, but at the same time brings out quite clearly that where women reach a certain standard of education and obtain responsible positions, they furnish a very much smaller percentage to the criminal classes. Accordingly, the manufacturing and mechanical pursuits, and to a very much greater extent trade and transportation, are responsible for far fewer offenders than domestic and personal service. Further, the Commissioners are of opinion that this arises not so much from any inherent evil in the work itself, but from the fact that it affords occupation for untrained and unintelligent women—a class that accounts for far the greater number of criminals. Summarised briefly, the position seems to be that "the relation between occupation and lawlessness is not directly causal; it lies deeper in the demand a given occupation makes for intelligence and character in its workers." The results of the investigation into the kinds of women who become offenders prove that asylums and reformatories are more needed than prisons; for the three categories of "moral imbeciles," "mentally deficient," and "low-grade intelligence" account for nearly all the criminals. This is even more true in cases of immorality, where it was found that mental deficiencies could often be assigned "as a lead-

ing cause of the girls' transgressions." The home environment was also found to be an equally potent cause, and should not be overlooked when any remedial measures are proposed. The necessity of tackling these problems free from prejudice is rather amusingly illustrated in the accounts of interviews with Superintendents of Rescue Homes. Each in turn takes up the utterly illogical position that while domestic service is responsible for the largest number of inmates in such asylums, yet it is the safest and most desirable occupation for girls.

The *History of Women in Trade Unions* gives an interesting account of the growth of the movement from 1825 to the present day. It is subdivided into four periods, each of which presents characteristics peculiar to itself. The rise of Trade Unions was accompanied by a series of important strikes, which gave place in the second period to "labour reform associations." The aim of the last period appears to consist of a desire on the part of the women "to ally themselves with the movement on an equal footing with men." Some of the most striking facts about the whole movement are its early rise and continued existence for so long a period, and the very competent women who have come forward as leaders. There is nothing comparable to it in England. Mr. and Mrs. Sidney Webb's *History of Trade Unionism* would lose but a few paragraphs if all reference to women were omitted, so small a part have women played in it in this country.

The fact that women have been very much less successful than men in their attempts at combination is said to be due to the fact that work is generally regarded by them as a temporary expedient, and that in consequence they do not interest themselves very much in economic or industrial problems, and are not willing to make any considerable sacrifices to raise their wages. However, as "marriage is coming to be looked upon less and less as a woman's 'sole career,' Trade Unionism may yet flourish among women." But employers, who "commonly and most strenuously object to a union among the women they employ," are an equally potent influence against Unionism.

In spite of these drawbacks, the efforts of Trade Unionists have not been entirely fruitless—wages have been increased in practically all the important trades, hours have been lessened, and "a considerably higher standard of respect and consideration for women has been gained in many factories."

The "Family Budgets of typical Cotton-mill Workers" is an important contribution to the economics of demand. Hitherto, questions of supply have been generally adequately dealt with,

but the no less important problem of demand has received but passing reference. This is gradually being rectified. In England the Board of Trade (Labour Department) has published an account of the "Expenditure of Wage-earning Women and Girls," giving the budgets of thirty women in several different trades for one year. Such inquiries, when a sufficiently large collection of records has been made, should throw light on such questions as the relative importance of food, clothing, &c., the cost of living, the minimum standard of comfort needed for efficiency, and other important problems.

GLADYS M. BROUGHTON

Tables showing for each of the Years 1900-1911 the Estimated Value of the Imports and Exports of the United Kingdom at the Prices prevailing in 1900. [Cd. 6314.] 1912. Price 3d.

In this Return, the sixth of the series, an important innovation has been made. The Board of Trade have adopted for the first time the method of compiling index numbers, originally proposed by Dr. Marshall in the *Contemporary Review* (1887), by which the results of any year are *directly* compared with those of the *preceding* year only, so that the basis of classification can be gradually changed, if this is desired, from year to year. In this way it is possible to take advantage of the improvements in classification that are naturally made as time goes on. The value of the foreign trade of the United Kingdom in 1909 has been calculated article by article at the average values of 1908, that of 1910 at those of 1909, and that of 1911 at those of 1910, this device being conveniently designated as the *step-by-step method*. The value of articles imported or exported in 1911 for which average values can be directly obtained in 1910 amounted to 89 per cent. of the whole value for imports, 83 per cent. for exports, and 81 per cent. for re-exports. For some of the remaining articles it was assumed that the change in their average values was in the same proportion as that of other articles included in the group to which they belonged, or in some sufficiently allied group. The figures for 1911 are as follows:—

		Values as declared. £	Ditto as percentage of declared values in 1900.	Estimated values at prices of 1900. £	Ditto as percentage of declared values in 1900.
Imports ...	...	680,559,000	130·1	624,995,000	119·5.
Re-exports ...	...	102,721,000	162·6	84,057,000	133·0
Net Imports ...	...	577,838,000	125·6	540,938,000	117·6
Exports ...	...	454,232,000	156·0	454,795,000	156·2

This table brings out the fact that we are obtaining for our exports almost exactly the same prices as in 1900, but are paying for our imports appreciably higher prices than in 1900.¹ We are, in fact, £37,000,000 a year worse off than we should be if all prices had moved equally. Interest in the recent great change in the general level of prices has rather obscured the fact that the prices of different groups of articles are moving very unequally. Although as a creditor nation, to whom large sums fixed in terms of gold are annually due, we are interested in low prices as such, we are also greatly interested in the question whether the prices of exports or of imports are rising the faster.

The deterioration—from the point of view of this country—shown above is due, of course, to the operation of the law of diminishing return for raw products which, after a temporary lull,² has been setting in sharply in quite recent years. There is now again a steady tendency for a given unit of manufactured product to purchase year by year a diminishing quantity of raw product. The comparative advantage in trade is moving sharply against industrial countries. This is brought out more clearly by the following table, which deals with the figures of 1911 :—

	Values as declared in 1911. £	Estimated value at prices of 1900.	Level of prices with 1900 as base.
Imports of Food, Drink, and Tobacco	264,334,000	239,647,000	110
Imports of Raw Materials, &c. ...	248,163,000	217,002,000	114
Imports of Manufactures ...	165,579,000	167,437,000	99
Exports of Manufactures ...	362,387,000	345,040,000	105

It may be added, in conclusion, as some slight consolation, that the relative prices of imports and exports were more favourable to this country in 1911 than in 1910 or in 1909, though less favourable than in earlier years.

J. M. KEYNES

First Report of the Departmental Committee on Local Taxation.
[Cd. 6304.] 1912.

Appendix to First Report of the Committee, vol. i. [Cd. 6303-i.]
1912. Price 4s. Vol. ii. [Cd. 6303-ii.] 1912. Price 1s. 4d.

THIS is the Committee which was appointed "to inquire into the changes which have taken place in the relations between

¹ It should be pointed out, however, that the general level of prices of our exports has risen somewhat, if coal, which was in an exceptional position in 1900, be excluded.

² See the memorandum by Professor A. L. Bowley, *Economic Journal*, 1903, p. 628, where it is shown that the prices of exports tended to fall relatively to those of net imports from 1873 to 1899, and to rise from 1899 to 1900. It is the abnormal tendency prevailing during the 'nineties which has since come to an end.

imperial and local taxation since the report of the Royal Commission on Local Taxation in 1901, and to make recommendations on the subject for the consideration of His Majesty's Government with a view to the introduction of legislation at an early date."

The report is merely of the nature of a covering letter presenting the two volumes of evidence and memoranda. The volume of evidence runs from November 15th, 1911, to May 1st, 1912. Both evidence and memoranda are of the partisan kind, being put in on behalf of fourteen bodies or associations which the witnesses, as the list frankly states, "represent." One of the witnesses (Qu. 6209) actually says, "I am bound to stand by this statement because it has been passed by my association; but I frankly admit. . . ." The plan of hearing what every organisation has to say is doubtless useful in its place, but it must always be remembered that it often happens that the interest of the whole community will not be represented either by any single organisation or by all the actual organisations taken together. In this matter of local and central taxation there is no organisation representing the more heavily-rated localities as against the others, and it seems highly probable that this committee, like its predecessors, may spend a great deal of time without even knowing what is the actual range of rates, much less what causes the variation.

EDWIN CANNAN

Report of the Commissioners of Inland Revenue for the year ended 31st March, 1912. [Cd. 6344.] 1912. Price 1s. 5d.

It is now possible for the first time to make a fairly accurate estimate of the total income subject to super-tax. The number of individuals actually assessed for the year 1909-10 is 10,976, and the Commissioners estimate that the ultimate total will reach about 11,250. The aggregate income disclosed in the 10,966 returns of 1910-11 is £135,739,172.

Considerable progress has now been made with the provisional valuations for increment duty. By March 31st, 1912, nearly two and a quarter millions (out of a total of approximately eleven millions) of hereditaments in Great Britain had been valued, and their aggregate total value, prior to deduction, amounted to £614,605,705. Thus, if these turn out to be a fair sample (and on that point no evidence is available in the Commissioners' Report)

the aggregate total value of land, &c., in Great Britain may amount to about £3,000,000,000.

The valuation is already proving of value from the point of view of the death duties. During the last financial year the work of the valuation assessors led to duty being paid on an amount 6·31 per cent. in excess of the value as brought in by the accounting parties, and in Ireland by an amount 15·17 per cent. in excess. These percentages may possibly supply a rough numerical measure of veracity in the two countries.

The Mineral Rights Duty seems to be working with very little friction, and produces a fair yield. But, so far as present indications go, the Undeveloped Land Duty is likely to be a failure.

The Commissioners' estimate of "income from abroad, so far as it can be identified," shows a large increase on the previous year, reflecting no doubt the large increases in foreign investments which are known to have been taking place lately. This total has risen from £93,264,004 in 1910-11 to £100,952,723 in 1911-12. As in former years, this does not include income derived from (a) concerns, other than railways, situate abroad but having their seat of management in this country; (b) concerns jointly worked abroad and in this country; (c) foreign and colonial branches of banks, insurance companies, and mercantile houses in the United Kingdom; (d) mortgages of property and other loans and deposits abroad belonging to persons or corporations in this country; (e) profits arising from business done abroad by manufacturers, merchants, &c., resident in the United Kingdom.

This increase in a single year amounting to more than £7,500,000 in the income derived from what is only one part of this country's foreign investments is remarkable. Nor do these figures suggest that income from foreign investments is being concealed from the Income Tax Commissioners to an increasing extent.

J. M. KEYNES

Report of the Mint, 1911. [Cd. 6362.] 1912. Price 1s. 6d.

THE Mint authorities continue the table showing the amount of gold coin held by banks, including the Bank of England, in the United Kingdom on June 30th of each year. The total in 1911 was £54,009,977, as compared with £44,214,173 in 1910. A note will be published in a subsequent number of the JOURNAL discussing what use can be made of these figures in estimating the

total gold reserves of the banks. The total gold coinage of the year reached an unprecedented figure, *viz.*, £33,132,828. Including sterling gold coins struck at the branch mints in Australia and Canada the total was £43,305,722, or a good deal more than the whole gold coinage of the rest of the world, *viz.*, £33,375,455. The British sovereign, therefore, seems to be further establishing itself as the international gold coin *par excellence*.

J. M. KEYNES

Reports from the Canadian Government and His Majesty's Representatives abroad, on Legislative Measures respecting Gambling in "Option" and "Future" Contracts. [Cd. 6441.] 1912. Price 2½d. (This is in continuation of Cd. 3280 of 1907.)

SINCE the last Report there have been legislative changes in France and Germany respecting dealings in "futures," and laws have been passed in Egypt and Japan. As regards Germany, the Bourse Law of 1896, which prohibited "time bargains" in agricultural produce, was superseded in 1908 by a less stringent law. Time bargains in corn are now permitted there, subject to certain special provisions. It is interesting to notice that in Canada it is still an indictable offence for any person to deal in stocks, goods, wares, or merchandise, with a view to obtaining profit by the rise or fall in their price, without the *bona fide* intention of acquiring or selling them, or in respect of which no delivery is made or received; and that every place where such transactions are carried on becomes a common gaming house. There have never been, however, any prosecutions under these sections of the Criminal Code.

Consular Report on the Economic Development of France in 1910 and 1911. [Cd. 6005—174.] 1912. Price 7½d.

THE most important points dealt with in this volume are :—The new general Tariff for 1910 and the commercial conventions with Canada, the United States and Japan; and the results of an official inquiry into the comparative increase in the cost of living and in wages during the past sixty years in certain specified occupations.

Report on Changes in Rates of Wages and Hours of Labour in the United Kingdom in 1911, with comparative statistics for 1902-1910. [Cd. 6471.] 1912. Price 8d.

"THE outstanding feature of the year was an increase in wages in the transport group of trades. The seamen, dock workers, carters, and others, obtained advances, mainly in the third quarter of the year, and subsequently all the railway servants had their wages increased, especially in the lower grades."

Official Year Book of the Commonwealth of Australia. Statistics for the period 1901-1911. (Melbourne: McCarron, Bird and Co. 1912. Pp. xl+1277.)

PREPARED by Mr. G. H. Knibbs, the Commonwealth Statistician. In addition to detailed statistics for 1901-1911 this Year Book gives corrected statistics for the whole period of Australian settlement—viz., from 1788 to 1911. There is a large number of maps and diagrams. In this issue particulars are given of an inquiry into the cost of living in Australia, carried out in 1910-11.

Publications of the United States Bureau of Labour.

THE publication of the series of Annual and Special Reports and of bi-monthly Bulletins has been discontinued, and in future a Bulletin will be published at irregular intervals, each number containing matter devoted to one of a series of general subjects. These Bulletins will be numbered consecutively in each series, and will also carry a consecutive whole number, beginning with No. 101. Amongst the topics of the several series may be mentioned Wholesale Prices, Retail Prices and Cost of Living, Wages and Hours of Labour, Women in Industry, Workmen's Insurance and Compensation, Conciliation and Arbitration, Labour Laws of the United States, and Foreign Labour Laws. Amongst those already issued may be mentioned:—No. 102: British National Insurance Act, 1911. No. 103: Sickness and Accident Insurance Law of Switzerland. No. 105: Retail Prices, 1890 to 1911: Part I.

Annuaire de Statistique Agricole, 1910. (Rome: Imprimerie de l'Institut International d'Agriculture. 1912. Pp. xlviii+327.)

THE first of a series of annual statistical abstracts which the *Institut International d'Agriculture* proposes to publish relating to

the agriculture of those countries which have adhered to the *Institut*. It deals with Area and Population, Agricultural Distribution, the Principal Crops, Index Numbers of Total Production, and Live Stock.

Annuaire de la législation du Travail, 1911. Vol. I. [Germany.]

Published by the Belgian *Office du Travail*. Brussels. 1912.
Pp. 837. Price 5fr.

Twelfth Financial and Economic Annual of Japan, 1912. Pub-

lished by the Department of Finance. Tokyo. 1912.
Pp. vi+204+46.

General View of Trade and Industry in the Netherlands.

Numbers I-XX. (The Hague: Commercial Department of the Netherlands Ministry of Agriculture. 1912. Price, for each number, 2d.)

THIS is a set of twenty pamphlets forming together a general view of trade and industry in the Netherlands, prepared by the Commercial Department at the Hague in co-operation with the Netherlands Chamber of Commerce in London. The pamphlets, which are fully illustrated and contain many statistics, seem to cover the ground very completely. They deal with the ports, steamship lines, and each of the principal industries.

OBITUARY.—DAVID FREDERICK SCHLOSS.

WE regret to have to record the death of Mr. David Frederick Schloss, which took place on October 15th. Mr. Schloss was in his sixty-third year, having been born at Manchester on April 5th, 1850. He was educated at the Manchester Grammar School and Corpus Christi College, Oxford, and was called to the Bar at Lincoln's Inn in 1875.

Mr. Schloss was a member of the British Economic Association from its foundation, and had been a member of the Council of the Royal Economic Society since 1900. He had contributed to THE ECONOMIC JOURNAL from the second number issued, from time to time, until March last, both original articles and reviews.

In 1881 he took up the work of treasurer of the East London Tailoresses' Union, and for some years was an active worker in the movement for promoting the formation of trade unions among women. He also gave his support to an interesting but short-

lived experiment in the shape of a co-operative tailors' workshop. His practical experience of the problems involved formed the inspiration of articles contributed to the *Charity Organisation Review* on the subject of sweating, and the article on the "Sweating System" in the eleventh edition of the *Encyclopædia Britannica* was from his pen. Those familiar with Mr. Charles Booth's great work on *Life and Labour in London* will remember that Mr. Schloss was one of his lieutenants, and that he prepared the article on the Boot Trade, which appeared in the first volume of that work. His knowledge of labour questions was utilised by the Board of Trade on the formation of the Labour Department, and he was associated with that Department from 1893 until his death, receiving a permanent appointment as investigator in 1899, and being placed in charge of the newly-created Census of Production Office in 1907. In 1893 Mr. Schloss was sent, in company with Mr. John Burnett, to inquire into foreign immigration into the United States, and his report to the Board of Trade will be familiar to students. More familiar, perhaps, is the Report published in the following year on the subject of *Profit-Sharing*, and that on *Gain-Sharing* issued in 1895. These reports fully maintained the reputation secured by the publication in 1892 of the volume in connection with which Mr. Schloss's name is probably best known to students of economics, namely, his *Methods of Industrial Remuneration*. Reprinted in 1894, and revised and enlarged in 1898, this work has enjoyed a well-deserved reputation, and a cheap edition was issued by the publishers in 1907. It has also been translated into German. A more recent work from his pen was that entitled *Insurance against Unemployment*, issued in 1909, in which his keen critical faculties were employed in the examination of the various efforts which have been made towards the solution of the great problem indicated by his title.

Besides preparing the above-mentioned reports, Mr. Schloss had a share in the preparation of the *Report on Contracts given out by Public Authorities to Associations of Workmen*, presented to the Board of Trade in 1896; and also prepared the *Report on Agencies and Methods for dealing with the Unemployed*, which was issued in 1904.

Not very long after Mr. Schloss undertook the organisation of the first Census of Production, his health unfortunately gave way, and he resigned the post of Director of the Census in January, 1908. He continued, however, his association with the Department which had so long profited by his services, and among the fruits of his labours are the Reports on Collective Agreements

between Employers and Workpeople in the United Kingdom, issued in 1910, and that on Co-partnership, in the preparation of which he was engaged when attacked by the illness which proved fatal. He was also one of the British Commissioners to the International Congress on Unemployment held at Paris in September, 1910.

Apart from his work as an official of the Board of Trade, Mr. Schloss for many years took an active part in the work of the Jewish Board of Guardians and the Anglo-Jewish Association. He was more particularly connected with the measures adopted by the former body to improve the sanitary conditions in which the Jewish poor live in the East End and in other parts of London, and was successively secretary and chairman of the committee appointed by the Board to deal with these matters. To the work of this committee Mr. Schloss devoted much time, and its reports bear testimony to the thorough knowledge, keen perception, and untiring industry which he brought to a difficult task, in which his initiative and sustained interest have done much to ensure a large measure of success.

His knowledge of the social and industrial condition of the Jews in London was thorough, and some of the earliest articles from his pen in leading periodicals dealt with important phases of their peculiar industrial problems.

As will be evident from the above, the subject around which the main work of Mr. Schloss centred was the improvement of the remuneration of the workman, a problem to which he devoted his best powers. He was not a blind adherent of any one solution of that problem, but gave to all serious attempts at improvement an impartial criticism as well as sympathetic consideration.

Of the Economic Club which meets at University College he had been a member from its first session in 1890-91, had held the office of president, and contributed largely to the interest of the meetings, at which he was a frequent attendant, both by what he added personally to the discussions and by the stimulus which his genial comments applied to others present.

A. W. F.

GIUSEPPE RICCA-SALERNO.

THE terrible illness which for more than ten years had clouded his mind and brought his work to an end so far as science was concerned, does not lessen the keen regret felt to-day by all Italian economists beside the grave of the distinguished master whose guidance and example were long invaluable to the intellectual life

of the nation. Born at San Fratello, in Sicily, in 1849, Giuseppe Ricca-Salerno had his economic training first at Pavia under Luigi Cossa, later under Adolph Wagner at Berlin. Thence he went to teach, first, finance in the University of Pavia, and, later, economics at Modena, and in 1891 at Palermo. Everywhere he showed a rare and valuable power of creating groups of disciples, some of whom are, or were, distinguished economists, such as Coràgliani, Graziani, Rabbeno, Loncao, De Francisci, Siragusa, Natoli, Caronna, Scherma, and others too many to enumerate.

But even more than by his notable success as a teacher, Ricca-Salerno helped the progress of Italian economic science by a series of profound and weighty publications. These began with a valuable treatise *On the Theory of Capital*, which gives a very careful summary of this fundamental category of Political Economy. Two years later he produced a book on the *General Theory of Public Debts*, and then the great *Critical History of Financial Doctrines in Italy* (1882), which was commended by the Accademia dei Lincei. This is a work of immense learning, in which the development of financial theory in different parts of the Peninsula is traced with great care and skill. From 1882 onwards his works follow at intervals of six years up to the end of the century, when his activities ceased only too completely. Thus, the *Manual of Finance* (1888), which has been constantly quoted and praised, was followed by two works on a larger scale, the *Theory of Value in the History of Economic Doctrines and Facts* (1894) and the *Theory of Wages in the History of Economic Doctrines and Facts* (1900).

But beside these substantial works the manifold activity of Ricca-Salerno expressed itself in a series of articles on the most varied matters of fact and theory. Among such writings we may recall those on the financial reforms of Miquel, on amendments in English banking administration, on the equalisation of the land tax in Italy, on progressive taxation, land nationalisation, municipal socialism, public debts, and industrial depression.

It is extremely difficult to characterise in a few sentences writings so varied both in their subject and purpose. But we can say, broadly, that one ruling idea underlies and connects them all. For his love of historical investigation, his great familiarity and sympathy with German science, which, even in its humblest forms, was familiar to him, and his singular attachment to the writers beyond the Rhine, were not enough to detach him from the deductive school, to which, despite a few formal and unimportant concessions, he remained rigidly faithful to his last breath.

In the course of his intellectual career we can readily discern two distinct phases. In the first, although he was largely inspired by Wagner, he was still far from adopting the audacious theories of the latter on the nationalisation of housing and on social finance; he confined himself to drawing from the master's teaching arguments for combining inductive and statistical research with purely deductive method, or to defending moderate State intervention by means of well-planned social legislation on behalf of the vanquished in economic warfare. But in 1888, when the Austrian school began to triumph in economics and finance, Ricca-Salerno openly joined it, and soon became one of its most fervent and authoritative champions in Italy. In fact, his *Manual of Finance* is obviously imbued with the theories of Sax, though with notable emendations on many fundamental points; while the two works on the theory of value and wages attempt to trace the line of intersection between the doctrines of the Austrian school and those of Karl Marx, and, in fact, constitute the first approach to the Austro-Marxian alliance, proposed with different degrees of success by Arturo Labriola and Enrico Leone in Italy and by Tugan Baranowski in Russia.

It can well be believed that the cessation of such varied activity and productiveness must cause the deepest sorrow to all true students, a sorrow shared not only by Sicily, to whom Ricca-Salerno was a devoted son and a venerated teacher, but by every part of Italy.

And it is with profound emotion that I personally pay my sorrowful tribute to the unwearied student, at first my learned guide in the paths of research, and later an indefatigable comrade on the battlefields of thought.

ACHILLE LORIA

CURRENT TOPICS.

THE Board of Trade returns of unemployment confirm the general conclusion that might be drawn from other sources, such as the statistics of foreign trade, the railway returns, and the slight upward movement in wages, that the general demand for labour is very active. The unemployed percentage of 2 at the end of last month is, indeed, lower than the Board of Trade chart has shown for any period during the last ten years, not only for this particular month but for any month in the year. Similarly, apart from the figure for October itself, the slightly higher percentages for August and September are also the lowest points reached during the same decennial period.

SUCH comparable figures as are obtainable from the working of the Labour Exchanges point in the same direction; the applications, for instance, for employment received by the 214 Exchanges that, out of the present total of 404, have been open for a year or more, having increased during last October, as compared with October, 1911, by only a little over 1 per cent., while the vacancies notified by employers increased by about 15 per cent.

THE present industrial activity is being accompanied by a comparative freedom from industrial conflict—a feature that is doubtless explained in part by the disputes through which great industries have recently passed. It is a moment of reaction. The question of industrial remuneration remains, however, as that which appears to be destined to continue to attract an exceptional degree of attention. It will claim this in many fields—political, social, and industrial—for fundamentally the question is a much wider one than that of wages, and even of earnings. It is equally a question of outlook, of attitude, of management, and of relationships, and as such it is already being recognised by, for instance, every great conciliation board, by every genuine co-operative enterprise, as well as by many individual employers and workers.

SINCE action taken under the Trade Boards Act was last mentioned in these notes, the minimum rates of wages for female workers fixed by the Paper Box Trade Board for Great Britain have been made obligatory by the Board of Trade, and this position has thus been reached in Great Britain in three out of the four trades scheduled under the Act. The new minimum rate is 3*d.* per hour. Special rates and special conditions for learners are set out in the Determination. Other minimum rates recently fixed, but not yet brought under obligatory order, have been: one for 2½*d.* per hour for female workers by the Paper Box Board for Ireland, and one for 3½*d.* per hour by the Ready Made and Wholesale Bespoke Tailoring Trade Board for Great Britain. For male workers in the same trade, and also in the paper box trade in Great Britain, minima of 6*d.* per hour have also been fixed.

A PRACTICAL recognition of the importance of co-operation in its application to agriculture has been recently given in the substantial grants made to the Agricultural Organisation Society for Great Britain. A corresponding recommendation on behalf

of the pioneer society in Ireland has been also made, and the withholding of the approval asked for from the Irish Department of Agriculture is still without satisfactory explanation.

THE Dundee meeting of the British Association was remarkable in more ways than one. First of all, the Association received from a prominent citizen of Dundee a gift of £10,000, the interest of which is now available for grants towards research conducted by individual members or groups of members in the various sections. Valuable statistical investigations have from time to time been undertaken by the Economic Section, but there is no such committee in the current year in receipt of a grant. It is to be hoped that some economists with a suitable scheme of investigation will be forthcoming next year : and the opportunity should appeal most strongly to the younger generation, whose attendance at present is very meagre. In the second place, the citizens of Dundee demonstrated the enthusiasm and sturdiness of the civic life of Scotland. It is sociologically of interest to observe how the British Association, which is for eleven months of the year a number of sealed boxes in a London office, becomes for one week in the remaining month a living being feeding and fed by the vital energy of the great aggregates of industrial population, in whose presence it revives once a year.

THE Economic Section, under the presidency of Sir H. H. Cunyngame, was very popular and practical ; and this ought really not to be a deterrent to attendance in the future, seeing that economic science is now reconciled to the fact that it is no longer concerned primarily with the imaginary bargainings of two savages on an otherwise uninhabited island. A Cabinet Minister and a Labour M.P. spoke from its desk, Mr. Herbert Samuel of Federalism and Mr. Ramsay Macdonald of the Minimum Wage. Sir Francis Webster, in a "Consideration of some of the causes affecting prices and wages during the last forty years, discussed the destination of the increasing gold supplies of the last twenty years, and the opposite price effect of the improvements in transport and manufacture from 1873 to 1898. "Forty years ago," he said, "in our own flax and hemp trade, we got none of the previous year's crop till May and June of the succeeding year. The crops of flax, hemp and grain were closed up in Russia. The trade had to depend on the fibre grown the year before. Now the new crop begins to come in the November of the year in which it is grown. By the months of May and June much of it is worked up, and the greater part of it is in spinners' hands."

It is not to be expected that the short discussions which follow each paper will be usually of much value. Those who know no economics say what they intended to say before the reader began; those who are learning economics are diffident of public speech; those who teach economics have sometimes not the heart to say it again. The case is otherwise when an economic problem bearing on the industrial conditions of the locality in which the Association is meeting is opened and discussed by local business men and experts. Amongst papers of this character may be mentioned Mr. James Cunningham's, on the origin and growth of the jute trade in Dundee and Germany. The problem is a fascinating one. The jute industry, spinning and weaving, is localised entirely at Dundee among some fifty firms. The paper and discussion elicited the following causes. In earlier times much flax was grown on the East Coast of Scotland. Dundee, a port with a big market for sail cloth and a big supply of rather unskilled labour, handled the rougher yarns. Samples of jute, which for two or three centuries had been a domestic manufacture in India, were shipped to Dundee, which had the machinery requisite for experiments on the rough fibre. There established by the second decade of the nineteenth century, it continued to abide, for reasons similar to those which have held the cotton trade to Lancashire. Dundee offers a supply of trained labour; and as one firm declines and another expands, the workers pass from mill to mill. A concentrated industry means a concentrated market, and this gives Dundee a pull on the raw material. While the German has to rely on the word of his Hamburg agent, the Dundee maker selects from samples. If he buys in advance fibre which turns out to be of a quality superior to what he needs, he can sell spot on delivery and buy in cheaper yarn for himself. Germany is our main Continental competitor. The industry there, in curious contrast, covers a wide area over the north of the country, it is now controlled by a Cartel, and, dating from 1861, it has expanded considerably since the introduction of protective duties in 1880. Sir Chas. Macara (*English Review*, September, 1912), has observed that the Lancashire cotton trade, though owning over one-third of the world's spindles, consumes only one-fifth of the yarn, which means that it specialises on the fine work, so that its importance can only be gauged by the extent of the machinery, the labour employed, the fineness, variety and value of the fabrics produced; and furthermore that the cost of erecting and equipping mills is greater by 40 per cent. and upwards in other countries. It seems that there is a parallel to this in the jute industry, though exact figures were not forth-

coming. Moreover, India herself has begun manufacture by power, just as she came to manufacture the coarser cottons. The first spinning factories in India in the 'fifties were equipped with Dundee machinery by Dundee men. At the present day jute companies controlled from Dundee, and largely owned by Dundee investors, consume material equal in bulk to one-half of Dundee's own requirements. Has Dundee cut its own throat, or has Dundee wisely taken the lead in Indian expansion, which would have occurred in any case? Finally, Dundee has a labour problem. Most of the workers are women and young persons. The spinners earn 12s. to 15s. a week; the weavers some 5s. more. Is the labour therefore sweated, and Dundee's staple trade parasitic? It is not easy to answer yes, when the husband is earning 5s. a day as a shipbuilder.

ON the last day Mr. A. Newlands, M.I.C.E., Assistant Engineer to the Highland Railway, argued for the economic possibilities of Scottish water power. He contended first that a continuous supply of water, equal to 500,000 horse-power, is available from Scottish falls in the Highlands, representing an amount of power on a ten-hour working day basis throughout the year equal to that obtained from $3\frac{1}{2}$ million tons of coal of the value of £1,750,000. Secondly, that after the experience of the British Aluminium Company at Kinlochleven, the utilisation of this power is within sight of commercial profitability, and is furthermore deserving of State support in the interests of the population of northern Scotland, which has felt so severely the drain of emigration. As regards transport facilities, the Highlands have a coast-line and canal offering cheap water transit; as regards raw materials the Highlands have wool, timber, and building material in abundance. Criticism of these proposals was directed upon the danger of destroying the beauties of Highland scenery. It was retorted that disfigurement only follows in the few cases of chemical works, and that hydro-electric power may be carried many miles to existing villages without serious waste. If the weaver's cottage once more throbs with the noise of a shuttle, which this time is driven from an electric switch, what will happen to unionism and the minimum wage?

THE *Société d'Économie Politique* offer a prize for an essay entitled *Étude comparée du taux des tarifs de douane dans les divers pays*. The prize, which comprises a gold medal of the value of 300 francs, and a sum of 400 francs in money, has been founded

by the late M. Emile Marcet, and will be offered triennially. M. Bellet, *Secrétaire perpétuel* of the Society, from whom further particulars may be obtained at 18 Rue des Canus, Maisons-Laffitte (Seine-et-Oise), courteously asks that the offer of this prize may be brought to the notice of members of the Royal Economic Society.

APPOINTMENTS.—Mr. R. B. Forrester, M.A., has been appointed Lecturer in Economics in the University of Aberdeen in succession to Mr. S. H. Turner, on the resignation of the latter to take up an appointment under the Insurance Commissioners for Scotland. Mr. Forrester graduated in the University of Edinburgh with Honours in Economics and Modern Languages in 1908. He proceeded thence to the University of Manchester with a Gartside Scholarship, and afterwards became Senior Lecturer in Economics there.

Mr. J. W. RAMSBOTTOM, B.A. (Manchester), has been appointed to the G. B. Hunter Lectureship in Commercial and Industrial Economics at Armstrong College, Newcastle. Mr. Ramsbottom graduated in 1912 with a first class in the Honours School of Economic and Political Science at Manchester, and has had experience as a factory inspector.

Mr. T. S. ASHTON, M.A. (Manchester), has been appointed Assistant Lecturer in Economics at Sheffield. It will be a part of the duties, both of Mr. Ashton and of Mr. Ramsbottom, to give lectures in connection with the Workers' Educational Association.

THE Editor of the ECONOMIC JOURNAL will be glad to receive regular notification of all appointments in Economics for record in the JOURNAL.

RECENT PERIODICALS AND NEW BOOKS.

The Economic Review.

- OCTOBER, 1912. *Agricultural Labourers and a Minimum Wage.* REGINALD LENNARD. *Christian Socialism: Some Notes on a Recent Controversy.* REV. H. H. WILLIAMS. Arising out of Dr. Sanday's pamphlet. "Some Weak Points in Christian Socialism: A Defence of the Middle Classes."

Bankers' Magazine.

- OCTOBER, 1912. *Increased Taxation on Successions.* Discusses the question of double taxation on property held in foreign countries or in the Colonies. *Bank of the Netherlands, 1911-12.* A translation of the official report.
- NOVEMBER, 1912. *Banking Reserves.* Discusses the relative proportions of gold and foreign bills held by the State Banks of Germany, Belgium, and the Netherlands. *West African Currency.* An account of the report of the Departmental Committee which has lately recommended the establishment of a gold-exchange standard in our West African Colonies.

The Sociological Review.

- OCTOBER, 1912. *The Economic Effects of Rising and Falling Prices.* W. T. LAYTON. Followed by a discussion in which Professors Fisher, Kemmerer, Denis, Gide, Rist, Chapman, and W. J. Roberts took part.

Women's Industrial News.

- OCTOBER, 1912. *The Need for More Women Factory Inspectors.*

Clare Market Review.

- OCTOBER, 1912. *The Whitewashing of Charles II.* DR. L. KNOWLES. Based on a study of the Calendars of his Treasury Books. *The Ocean Tramp: Its Influence on Railway Charges.* DIXON H. DAVIES. Examples of how the competition of tramps complicates the fixing of railway rates. *Some Problems of Distribution: I. Concerning Income from Land.* HUGH DALTON.

American Economic Review (Boston).

- SEPTEMBER, 1912. *Will the Present Upward Trend of World Prices Continue?* IRVING FISHER. Professor Fisher estimates the recent percentage rates of growth and the probable future rates of the various items in his "Equation of Exchange." On this

basis he anticipates that prices will rise for the next fifteen years at an average annual rate of 2 per cent., and he thinks that the chances are 100 to 1 that prices will be higher fifteen years hence than they are now. *The Report of the Tariff Board on Cotton Manufactures*. M. T. COPELAND. The Board found that, for the counts chiefly produced in America, the lowest English cost, exclusive of raw materials, was about 73 per cent. of the lowest American cost. Taking account of the cost of raw material, the cost of producing yarn was 8.8 to 11.2 per cent. higher in America. On fine yarns the English spinners have a greater advantage. *A Balanced Tariff*. H. B. WALLACE. A proposal that producers of goods protected by the tariff should pay a federal excise tax at a rate bearing a fixed proportion to the rate of the import duties. *Jevons' "Theory of Political Economy."* ALLYN A. YOUNG. An attempt to estimate the importance of Jevons' contributions to economics. *Opportunity Cost*. LEWIS H. HANEY. A criticism of some theories of Professor Davenport.

Quarterly Journal of Economics (Boston).

AUGUST, 1912. *Ricardo's Criticisms of Adam Smith*. ROBERT A. MACDONALD. The object of this article is to ascertain to what extent Adam Smith and Ricardo actually differed in their conception and treatment of economic phenomena. *A Group of Trusts and Combinations*. W. S. STEVENS. An account of the available information relating to a number of minor trusts, including the Electric Lamp Combination, the United Shoe Machinery Company, the Bath Tub Combination, and the National Cash Register Company. *H. C. Carey's Attitude Towards the Ricardian Theory of Rent*. JOHN ROSCOE TURNER. The writer "finds, contrary to the general opinion, that Carey never denied the theory of diminishing returns in the sense that Ricardo taught it." *The Relation Between Kinds of Statistical Units and the Quality of Statistical Material*. G. P. WATKINS. *Some Problems in Market Distribution*. A. W. SHAW. *Tudor "Books of Rates": a Chapter in the History of the English Customs*. N. S. B. GRAS. An attempt "to determine the dates of the earlier books, the nature of their contents, and the reasons for their issue." *The Possibility of Certain Gains from Protective duties*. H. H. O'FARRELL. A criticism of some passages in Professor Taussig's *Principles of Economics*. *Wages and Ability*. R. M. WOODBURY. A criticism of that chapter of Professor Moore's *Laws of Wages* which has been already criticised in this JOURNAL by Professor Edgeworth.

Political Science Quarterly (New York).

SEPTEMBER, 1912. *Present Problems in Railway Regulation*. W. Z. RIPLEY. *Recent Tax Reforms Abroad*. I. E. R. A. SELIGMAN. This article deals with Great Britain.

Annals of American Academy (Philadelphia).

SEPTEMBER, 1912. *The Initiative, Referendum, and Recall*. A series of articles.

The Journal of Political Economy (Chicago).

- OCTOBER, 1912. *The Beginnings of Irrigation in the United States.*
 R. H. HESS. *Scientific Management and the Wage-earner.*
 F. T. CARLTON. A discussion of "Taylorism."

Revue d'Économie Politique (Paris).

- SEPTEMBER-OCTOBER, 1912. *Le Salaire réel et sa nouvelle Orientation.* A. AFTALION. *De l'unité du crédit à court terme sous la variété de ses formes.* M. ANSIAUX. A discussion of the similarities and distinctions between notes, deposits, and bills. *Les Banques aux États-Unis.* G. FRANÇOIS. Mainly historical.

Journal des Économistes (Paris).

- SEPTEMBER, 1912. *La Valeur locative des propriétés foncières non bâties en France.* YVES GUYOT. *L'Évolution économique de la République Argentine.* GEORGES LAFOND. Fourth article. *La loi anglaise d'assurance sociale de 1911.* MAURICE BELLOM. Second article; continued in October.
- OCTOBER, 1912. *La Banque d'État prussienne.* ARTHUR RAFFALOVICH. An historical account of the *Seehandlung*. *Les Sociétés à forme tontinière.* P.-J. RICHARD
- NOVEMBER, 1912. *Les Caisses de conversion de la République Argentine et du Brésil.* G. SUBERCASEAUX. A useful article by the Professor of Political Economy in the University of Chili. *Le Protectionnisme honteux et les Indications d'origine.* DANIEL BELLET.

Revue Économique Internationale (Brussels).

- AUGUST, 1912. *La Question du Minerai de Fer.* J. DE LAZURTIGUI. On the international trade in iron ore. *Le Développement des Opérations de crédit des grandes Banques françaises.* A. HUART. *Influence de l'évolution moderne sur la politique d'escompte.* DR. VON LUMM. On the development of banks of issue, chiefly with reference to the Reichsbank. *Le Taylorisme.* R. LUCION. On Mr. Taylor's "Principles of Scientific Management," which has now been translated into French.
- SEPTEMBER, 1912. *Les Embarras financiers de l'Allemagne.* GEORGES BLONDEL. *La situation financière de l'Allemagne.* DR. ALBERT HAAS. *Les Marchés financiers de Berlin et de Paris et la Crise franco-allemande de Juillet-Octobre, 1911.* JEAN LESCURE. These three articles all dwell on the small proportion which Germany's liquid resources bear to her capital, and on the responsibility of her banking system for this. M. Lescure's article contains some useful statistics. *Le commerce extérieur du Danemark.* DR. K. A. GERLACH.
- OCTOBER, 1912. *La Désertion des Campagnes.* J. MÉLINE. Chiefly an account of International Agricultural Congresses and of the programme of the forthcoming Congress at Gent. *Phénomènes et Lois récentes relatives à la Propriété Foncière.* ACHILLE LORIA. *L'Unification des Régimes douaniers.* G. DELEENER. *Les établissements de Crédit et les Banques locales en France.* H. VAN DEURSEN. *La nouvelle législation française sur les*

retraites ouvrières et paysannes. M. BELLOM. A summary of the Act. *La réalisation de l'Empire Britannique.* L. DECHENNE. On imperial federation.

Archiv für Sozialwissenschaft und Sozialpolitik (Tübingen).

- SEPTEMBER, 1912. *Ueber Gesetzmässigkeiten in der Geschichte* ("historische Gesetze"); *Logische Untersuchungen.* PROF. FRANZ EULENBURG. An important contribution to the philosophy of history in continuation of former articles in the *Archiv.* List's *Nationales System und die "nationale" Wirtschaftspolitik.* PROF. HEINRICH DIETZEL. The agrarian supporters of high tariffs cannot justly claim the support of List. Prof. Dietzel would like to see the immediate and complete establishment of Free Trade in Germany. *Arbeiterversicherung und Armenwesen in Deutschland.* DR. F. ZAHN. A discussion of the relation of Insurance to the Problems of Pauperism. *Neuere Literatur über Agrarwesen und Agrarpolitik.* R. LEONHARDT. *Zum Malthus-Problem.* DR. F. OPPENHEIMER.

Jahrbücher für Nationalökonomie und Statistik (Jena).

- AUGUST, 1912. *Das Zurückgehen der Bedeutung der Zentralnotenbanken.* SVEN HELANDER. Concluding article, dealing with the note issues of France and of Germany, and with general conclusions. *Kommunalbesteuerung und Kommunalverschuldung in Preussen.* HANS GEHRIG. A survey of the latest developments. *Die Wirkungen der Bekanntmachung des Reichskanzlers vom 19. Dezember 1908, betreffend den Betrieb der Anlagen der Grossisenindustrie.* E. WISKOTT. Deals with overtime and the hours of labour generally.
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- PART II., 1912. *Die Finanzen der europäischen und der wichtigeren ausser-europäischen Staaten* (112 pp.). DR. O. SCHWARZ. A

- summary of the budgets and financial arrangements of the principal States in 1911, containing an immense quantity of facts.

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- APRIL-MAY, 1912. *Studi di Economia finanziaria.* E. BARONE. The first instalment of studies dealing with (1) income and pressure of taxation; (2) the general theory of taxation; (3) and the shifting of imposts. *Relazioni fra entrata e consumo.* G. DEL VECCHIO. A continued study on family budgets. *Prezzi . . . nel Secolo XVI. in Roma.* S. CATERINI. JUNE, 1912. *Studi di Economia finanziaria.* E. BARONE. (Continued.) Part II. The general theory of taxation. *La crisi cotoniera . . . in Italia.* C. DI NOLA. JULY-AUGUST. *Studi di Economia finanziaria.* E. BARONE. (Continued and ended.) Part III. The shifting of taxes. *Paretaio.* L. AMOROSO. A reply to Professor Jannaccone's jocular remarks on the admirers of Professor Pareto. *Una famiglia di Mezzadri.* S. DOLFIN. An elaborate family budget.

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- OCTOBER, 1912. *Le finanze della Guerra.* F. FLORA. On the ways of meeting the cost of war.

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English

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[“Since the first publication of this book the position in regard to the treatment of unemployment in the United Kingdom has been radically altered by the passage of the Labour Exchanges Act, 1909, and the National Insurance Act, 1911. The most important of the relevant public documents have accordingly been reprinted in Appendices . . . No revision of the book itself has been attempted.”]

CANNAN (PROFESSOR EDWIN). *The Economic Outlook*. London: Fisher Unwin. 1912. Pp. 312. 5s. net.

[A collection of articles, reprinted from various Journals, with an introduction. Reviewed above.]

CHAPMAN (S. J.). *Political Economy*. (Home University Library.) London: Williams and Norgate. 1912. Pp. 256. 1s. net.

[To be reviewed.]

GIBBON (I. G.). *Medical Benefit in Germany and Denmark*. London: P. S. King. 1912. Pp. xv + 296. 6s. net.

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HUSKINSON (THOMAS W.). *The Bank of England's Charters the Cause of our Social Distress*. London: P. S. King. 1912. Pp. ix + 140. 2s. 6d. net.

[One more addition to the large literature advocating the view that the Bank Act alone stands between this country and the millennium. If the Bank Charter were amended, the author “doubts the possible existence of a really poor person.”]

LEE (IVY L.). *Railway Progress in the United States*. London: Stevens & Brown. 1912. Pp. 31.

[An address delivered at the inaugural session of the Transport Section of the London School of Economics. Referring to recent utterances of Mr. Prouty (Chairman of the Interstate Commerce Commission), the lecturer discerns a more sympathetic attitude of the public towards railways, promising the permission of a return adequate to encourage the investment which is necessary to much required developments.]

LEWIS (E. A.). *The Mediæval Boroughs of Snowdonia*. London: Sotheran. 1912. Pp. xviii + 320.

“A Study of the Rise and Development of the Municipal Element in the Ancient Principality of North Wales down to the Act of Union of 1536.” Thesis approved for degree of D.Sc. (Econ.) in the University of London. University of Wales Series of Literary and Historical Studies, No. I.]

MACDONALD (J. RAMSAY). *Syndicalism*. London: Constable. 1912. Pp. 79. 1s. net.

[An expansion of articles which appeared in the *Daily Chronicle*. Reviewed above.]

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*[A reprint of articles and speeches on fiscal, land, and other subjects of public controversy, including Free Trade, Land Taxation, and Working Class Insurance.]

National Conference on the Prevention of Destitution. London: P. S. King. 1912. Pp. xviii+593. 10s. 6d. net.

[A report of the Proceedings of the Conference held in June under the presidency of the Bishop of Oxford, including sections on Public Health, Housing and Unemployment.]

PIERSON (N. G.). Principles of Economics. Volume II. Translated from the Dutch by A. A. Wotzel. London: Macmillan. 1912. Pp. xxiii+645. 10s. net.

[Volume I., the translation of which was published ten years ago, dealt with *Value in Exchange and Money*. This Volume deals with *Production and The Revenues of the State*. To be reviewed.]

PIGOU (A. C.). Wealth and Welfare. London: Macmillan. 1912. Pp. xxxi+493. 10s. net.

[Extract from preface:—"Several years ago I began to study the causes of unemployment. It soon became apparent, however, that these causes are so closely interwoven with the general body of economic activity that an isolated treatment of them is scarcely practicable. Hence the gradual growth and more extended scope of the present volume." To be reviewed.]

REEVES (W. PEMBER), Prefaced by. Lectures on British Commerce, including Finance, Insurance, Business, and Industry. London: Sir Isaac Pitman. 1912. Pp. xvi+279. 7s. 6d. net.

[Lectures delivered by Mr. Huth Jackson, Professor Armitage-Smith, Mr. Robert Brown, Mr. Douglas Owen and others in the summer of 1911 for the International Society for the Promotion of Commercial Education.]

ROBERTSON (W. A.). Combination Among Railway Companies. London: Constable. 1912. Pp. 105. 1s. net.

[Lectures at the London School of Economics. Reviewed above.]

ROGERS (JAMES E. THOROLD). Six Centuries of Work and Wages: the History of English Labour. Eleventh edition. London: Fisher Unwin. 1912. Pp. 591. 10s. 6d. net.

SCOTT (W. R.). The Constitution and Finance of English Scottish, and Irish Joint-stock Companies to 1720. Vol. I. The General Development of the Joint-stock System to 1720. Cambridge: University Press. 1912. Pp. lvi+488. 17s. net.

[This completes Dr. Scott's great work, Vols. II. and III. having been published already. To be reviewed.]

SELLERS (MAUD). York Memorandum Book. Part I. (1376-1419). London: Quaritch. 1912. Pp. lxxxvi+287.

[Vol. CXX of the *Publication of the Surtees Society*. Relating to the municipal and economic history of York.]

TAWNEY (R. H.). The Agrarian Problem in the Sixteenth Century. With six maps. London: Longmans, Green. 1912. Pp. xii+464. 9s. net.

[To be reviewed.]

The Burden of Protection: an International Repudiation of the Gospel of Artificial Scarcity. London: P. S. King. 1912. Pp. vii+126. 1s. net.

[Published by the International Free Trade League. A series of papers by various writers dealing with Protection in different countries. Lord Welby writes on the United Kingdom, M. Bollet on France, Professor Brentano on Germany, M. Novikow on Russia, Professor Amano on Japan, Mr. Byron W. Holt on the United States, and so forth.]

WATNEY (CHARLES) and LITTLE (JAMES A.). *Industrial Warfare: the Aims and Claims of Capital and Labour*. London: John Murray. 1912. Pp. x + 353. 6s. net.

WEBB (SIDNEY) and FREEMAN (ARNOLD), Edited by. *Seasonal Trades*. London: Constable. 1912. Pp. xi + 410. 7s. 6d. net.

[Papers by various writers, the outcome of a Seminar at the London School of Economics during 1910, with an introduction by Mr. Sidney Webb. To be reviewed.]

Year-Book of Social Progress. London: Nelson. 1912. Pp. 617. 2s. net.

[A summary of recent legislation, official reports, and voluntary effort, with regard to the welfare of the people." The volume deals with such topics as Institutions for Social Study, Local Government Town-Planning, Employments of Women, Co-operative Apprenticeship, Poor Law and Social Settlements, and is likely to be useful as "a Guide and Dictionary for those who are interested in Social Questions." Professor Ashley contributes an introduction *On Social Study*, which has also been reprinted separately for private circulation, and four articles are contributed by Mr. F. S. Perris.]

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KENNAN (K. K.). *Income Taxation: Methods and Results in Various Countries*. Milwaukee, Wis.: Burdick & Allen. 1910. Pp. 347. \$3.50.

[Containing details of the income taxes of numerous small countries. Reviewed above.]

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[“A study of the proposed channel, terminals, water-craft freight movement, and rail and boat rates,” reprinted with additions from the *Journal of Political Economy*, vol. xx.]

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BLONDEL (GEORGES). *Les Embarras de l'Allemagne*. Paris: Librairie Plon. 1912. Pp. viii + 316. Fr. 3.50.

[“L'Allemagne,” the author holds “semble parvenue à un tournant de son histoire. En dépit des progrès considérables qu'elle a réalisés, on sent qu'il y a aujourd'hui dans toutes les classes de la société un sentiment de malaise.” He attempts to analyse the economic and political causes of this malaise.]

HALÉVY (ÉLIE). *Histoire du Peuple Anglais au XIX^e Siècle*. Vol. I. L'Angleterre en 1815. Paris: Hachette. 1912. Pp. 620. Fr. 15

[The first of four projected volumes. The second part of this volume (175 pp.) deals with economic history. To be reviewed.]

HEIDBORN (A.). *Les Finances Ottomanes*. Vienna: C. W. Stern. 1912. Pp. 295. Fr. 15.

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HOCK (A.). *L'Agriculture au Katanga: Possibilités et Réalités*. Brussels: Misch & Thron. 1912. Pp. 305.

[Published by the *Institut Solvay*—on agriculture in the Belgian Congo.]

INSTITUT SOLVAY. *La Politique de Réforme Sociale en Angleterre*. Brussels: Misch & Thron. 1912. Pp. xv + 191.

[Lectures delivered to the *Institut Solvay* by members of the Eighty Club—Mr. Philip Morrell on *La Politique agricole*, Mr. A. G. Gardiner on *La Politique sociale*. Sir John Brunner on *La Politique industrielle*, and Mr. Charles Mallet on *La Politique fiscale*.]

LORIA (ACHILLE). *Les Basés économiques de la Justice internationale*. London: Williams & Norgate. 1912. Pp. 93. 3s. 6d. net.
[A publication of the Nobel Institute. To be reviewed.]

MARTIN (ÉTIENNE). *Histoire financière et économique de l'Angleterre, 1066-1902*. 2 vols. Paris: Alcan. 1912. Pp. xii + 512 + 342. Fr. 20.

[A history, in the main, of British public finance. To be reviewed.]

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ESSEN (PROF. J. E.). *Die Fleischversorgung des deutschen Reiches*. Stuttgart: F. Enke. 1912. Pp. xiv + 289. M. 7.

[“An enquiry into the causes and effects of the rising cost of meat and into means for remedying it.”]

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[From the *Vorträge der Gehe-Stiftung zu Dresden*.]

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[Vol. 10 of the *Schriften des Instituts für Seeverkehr und Weltwirtschaft an der Universität Kiel*, edited by Prof. Harms under the general title of *Probleme der Weltwirtschaft*. To be reviewed.]

FRIDRICHOWICZ (EUGEN). *Grundriss einer Geschichte der Volkswirtschaftslehre*. Munich: Duncker & Humblot. 1912. Pp. vii + 267. M. 6.

[There are few economists which this history of economic theory does not contrive to name at least in a footnote. If the treatment of modern English economists is typical, it seems doubtful whether the method followed is illuminating. J. H. Chapham (*sic*), Sidney J. Shapman (*sic*), L. Darwin, C. R. Fay, Goschen, W. E. Hearn, A. T. Hadley, MacGregor, Alfred Marshall, H. W. Macrosty (and H. W. Wolff appear together as followers of the “ältere deutsche historische Schule,” in a footnote on Cliffe Leslie, who, as the English leader of this school, receives a paragraph in the main text.)]

KOWALEWSKY (MAXIME). *Die ökonomische Entwicklung Europa's bis zum Beginn der kapitalistischen Wirtschaftsform*. VI. Berlin: Prager. 1913. Pp. 501.

LEVY (HERMANN). *Die Grundlagen des ökonomischen Liberalismus in der Geschichte der englischen Volkswirtschaft*. Jena: Gustav Fischer. 1912. Pp. vii + 128. M. 3.50.

[To be reviewed.]

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[To be reviewed.]

PASSOW (RICHARD). Materialien für das wirtschaftswissenschaftliche Studium. • Vol. ii—Effektenbörsen. Leipzig: Teubner. 1912. Pp. 148. M. 2.40.

[A collection of material for reference on the law and practice of German exchanges.]

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[Part 2 of the *Veröffentlichungen zur Statistik des Bodenkredits und verwandter Gebiete*, published by the *Archiv für Bodenkredit der Bayerischen Handelsbank zu München*.]

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[To be reviewed].

VOIGT (A.). Technische Oekonomik. Tübingen: J. C. B. Mohr. 1912. Pp. 97

[Reprinted from *Wirtschaft und Recht der Gegenwart*.]

Italian

EPINAUDI (LUIGI). Intorno al concetto di Reddito Imponibile e di un sistema d'imposte sul Reddito Consumato. Turin: Vincenzo Bona. 1912. Pp. viii+105.

[From the *Memorie della Reale Accademia delle Scienze di Torino*. To be reviewed.]

LORIA (ACHILLE). Le Basi economiche della Costituzione Sociale. Quarta edizione riveduta e rinnovata. Milan: Fratelli Bocca. 1912. Pp. xii+620. L. 15.

[The third edition was reviewed in the *ECONOMIC JOURNAL*, vol. xii, p. 389. This edition has been largely worked over again—"an old man's renewal of the work of his youth."]

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